REIMBURSEMENT

PRODUCT	VIAL SIZE	NDC	SEPTEMBER AWP/VIAL	'98 HCPCS CODE	BILLING UNITS
Methotrexate, sol w/pres. (25 mg/mL)	50 mg	58406-0681-14	4.75	J9260	per 50 mg
	250 mg	58406-0681-17	20.48	J9260	per 50 mg
Methotrexate, tablets, 2.5 mg	100 per bottle	00555-0572-02	362.95	J8610	2.5 mg
	36 per bottle	00555-0572-35	130.05	J8610	2.5 mg
Metoclopramide, sol w/pres. (5 mg/mL)	2 mL	39769-0066-02	2.40	J2765	up to 10 mg
Metoclopramide, pres. free sol (5 mg/mL)	50 mg	00013-6116-95	8.73	J2765	up to 10 mg
	150 mg	00013-6126-95	23.54	J2765	up to 10 mg
Mutamycin®					
Mitomycin, pwd	5 mg	00015-3001-20	134.11	J9280	per 5 mg
	20 mg	00015-3002-20	452.91	J9290	per 20 mg
	40 mg	00015-3059-20	915.09	J9291	per 40 mg
Novantrone®					
Mitoxantrone, sol (2 mg/mL)	20 mg MDV	58406-0640-03	812.74	J9293	per 5 mg
	25 mg MDV	58406-0640-05	1,015.90	J9293	per 5 mg
	30 mg MDV	58406-0640-07	1,219.10	J9293	per 5 mg
Sandostatin®					
Octreotide Acetate, sol (50 mcg/mL)	50 mcg amp	00078-0180-03	5.21	J9999*/J3490†	
Octreotide Acetate, sol (100 mcg/mL)	100 mcg amp	00078-0181-03	9.54	J9999*/J3490†	
Octreotide Acetate, sol (500 mcg/mL)	500 mcg amp	00078-0182-03	43.62	J9999*/J3490†	
Zofran®					
Ondansetron HCl, sol (2 mg/mL)	40 mg MDV	00173-0442-00	244.43	J2405	per 1 mg
Ondansetron HCl, sol (2 mg/mL)	4 mg	00173-0442-02	24.45	J2405	per 1 mg
Ondansetron HCl, sol premixed (32 mg/50 mL D5W)	32 mg bag	00173-0461-00	206.41	J2405*	per 1 mg
Neumega®					
Oprelvekin	5 mg	58394-004-01	235.00	J3490†	per 5 mg
TAXOL®					
Paclitaxel, semi-synthetic sol (6mg/ml)	30 mg	00015-3475-30	182.63	J9265	per 30 mg
	100 mg	00015-3476-30	608.76	J9265	per 30 mg
	300 mg	00015-3479-11	1,826.25	J9265	per 30 mg
Aredia®					
Pamidronate disodium, pwd	30 mg	00083-2601-04	218.24	J2430	per 30 mg
	60 mg	00083-2606-01	428.97	J2430	per 30 mg
	90 mg	00083-2609-01	621.75	J2430	per 30 mg
Nipent™					
Pentostatin, pwd	10 mg	62701-0800-01	1,645.00	J9268	per 10 mg
Prochlorperazine, sol (5 mg/mL)	10 mg	00364-2231-48	2.64	J0780	up to 10 mg
	50 mg MDV	00364-2231-54	13.00	J0780	up to 10 mg
Prochlorperazine, tablets, 10 mg	100 per box	00007-3367-20	94.50		
Zantac®					
Ranitidine, sol (50 mg/2 mL)	2 mL	00173-0362-38	3.99	J9999*/J3490†	
Rituxan™					
Rituximab	100 mg	50242-050-21	397.50	J3490†/J9999	per 100 mg
Zanosar®					
Streptozocin, pwd	1 g	00009-0844-01	96.51	J9320	per 1 g
Vumon®					
Teniposide, 50 mg	5 mL amp	00015-3075-19	181.01	J9999*	per 50 mg
Thioplex®					
Thiotepa, pwd	15 mg	58406-0661-02	90.24	J9340	per 15 mg
Hycamtin™					
Topotecan HCl lyoph pwd	4 mg	00007-4201-01	548.35	J9350	per 4 mg
	4 mg, 5s	00007-4201-05	2,741.75	J9350	per 4 mg
Neutrexin®					
Trimetrexate glucuronate, pwd	25 mg, 10s ea.	58178-0020-10	633.60	J3305	per 25 mg
	25 mg, 50s ea.	58178-0020-50	3,037.20	J3305	per 25 mg
Urokinase, sol (5,000 IU/mL)	5,000 IU	00074-6111-01	56.26	J3364	per 5,000 IU
	9,000 IU	00074-6145-02	98.13	J3364	per 5,000 IU
Vinblastine sulfate, pwd	10 mg	55390-0091-10	21.25	J9360	per 1 mg
	10 mg	00364-2447-54	37.50	J9360	per 1 mg
Vinblastine sulfate, sol (1 mg/mL)	10 mg	00469-2780-30	43.23	J9360	per 1 mg
Vincristine, preservative free sol (1 mg/mL)	1 mg	00013-7456-86	37.08	J9370	per 1 mg
	1 mg	61703-0309-06	31.75	J9370	per 1 mg
	2 mg	00013-7466-86	74.13	J9375	per 2 mg
	2 mg	61703-0309-16	38.25	J9375	per 2 mg
Vincristine, preservative free sol (5 mg/mL)	50 mg	61703-0210-11	7.47	J9380	per 5 mg
	150 mg	61703-0210-31	20.30	J9380	per 5 mg
NAVELBINE®					
Vinorelbine tartrate, sol (10 mg/mL)	1 mL	00173-0656-01	66.35	J9390	per 10 mg
	5 mL	00173-0656-44	331.78	J9390	per 10 mg

• An AWP, HCPCS code or NDC that has been highlighted in color.

* The drug code J9999 is defined as "not otherwise classified, antineoplastic drug." The Health Care Financing Administration (HCFA) has not assigned specific codes to these drugs.

† The drug code J3490 is defined as "unclassified drug." These drugs may or may not be defined as an unclassified drug in your area. Consult your local carrier for the appropriate code.

‡ Q0136 is the code for non-ESRD (End Stage Renal Disease) use.

+ J2405 should be used for all formulations of Zofran.

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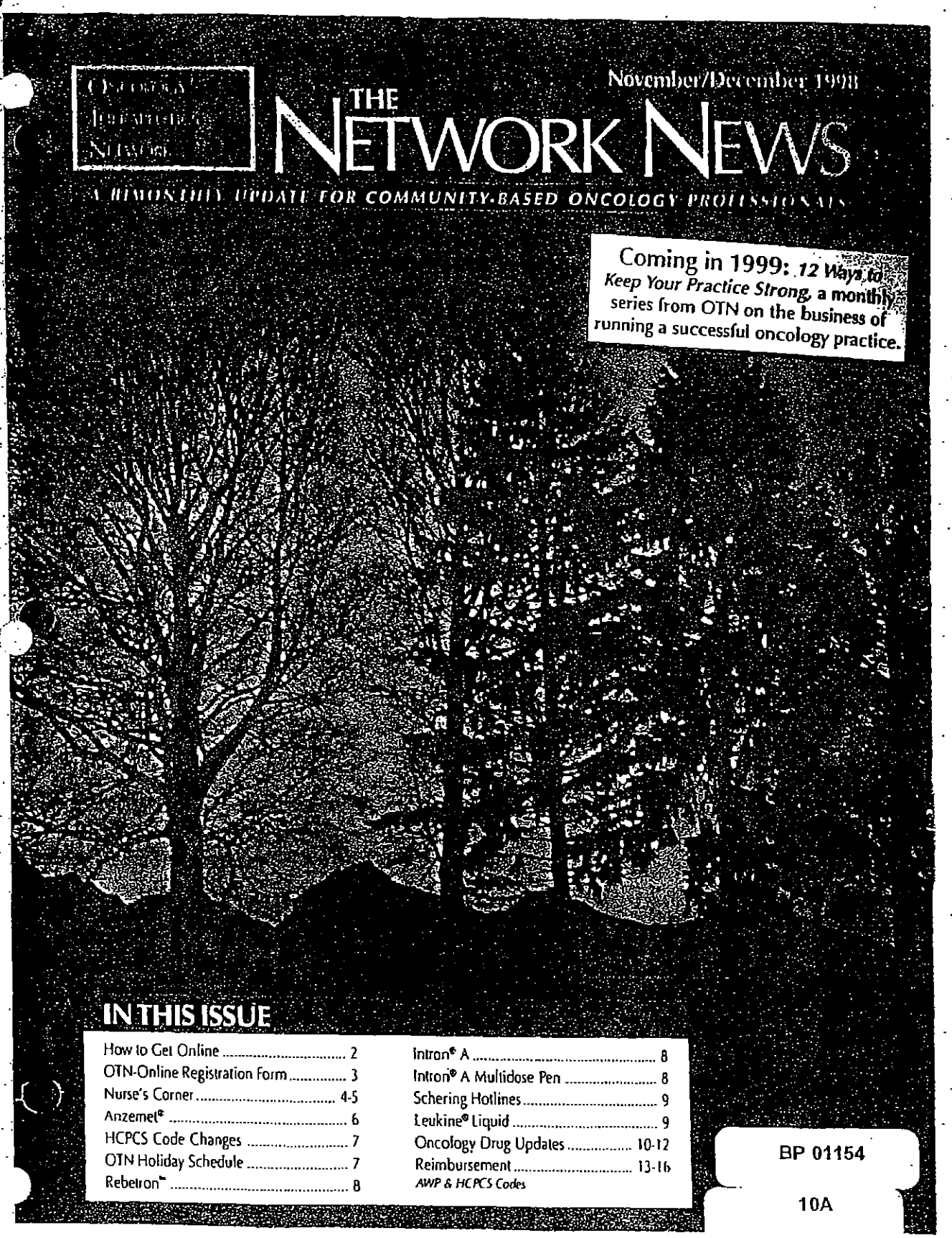
November/December 1998

THE NETWORK NEWS

A MONTHLY UPDATE FOR COMMUNITY-BASED ONCOLOGY PROFESSIONALS

Coming in 1999: *12 Ways to Keep Your Practice Strong*, a monthly series from OTN on the business of running a successful oncology practice.



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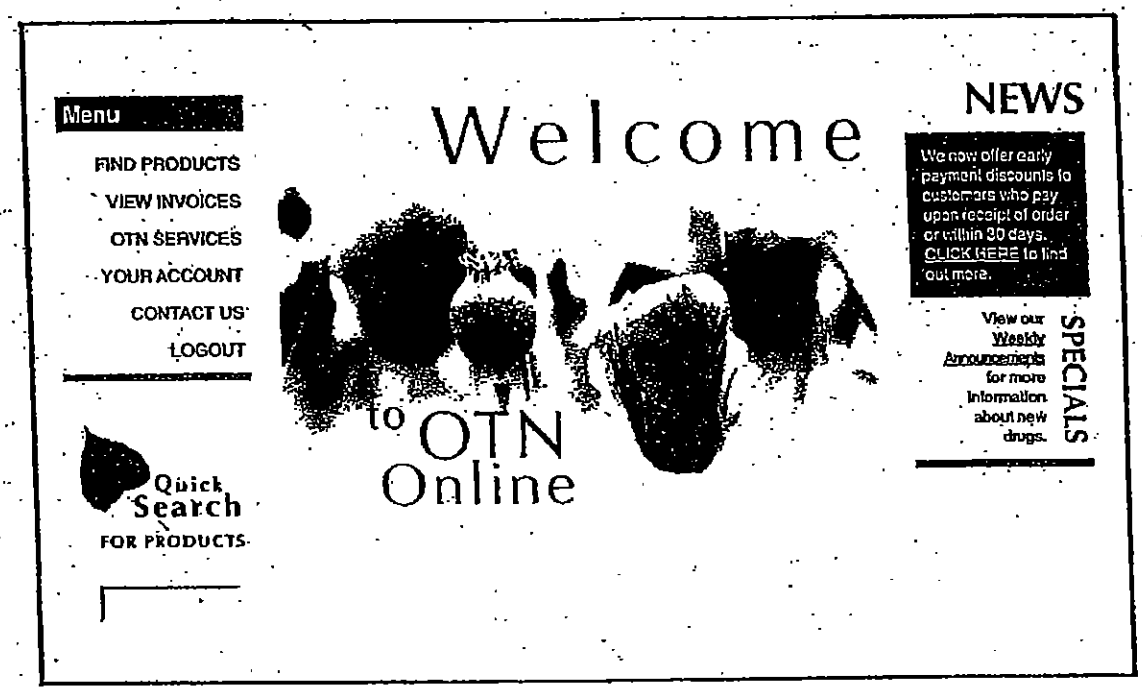
ONCOLOGY THERAPEUTICS NETWORK

www.otn-online.com



How to Get Online

There are two things that you need to get online. First, you need a computer with a modem. Second, you need an account with an Internet Service Provider (ISP). Choosing an ISP is a lot like choosing a long distance provider. Although every company claims superior service, most individuals find the services available very similar. These services cost between $15 and $25 dollars monthly, provide e-mail accounts, and come with all the software needed to surf the net. While the higher priced services offer more advanced features (website hosting, etc.), it's more important for beginning Internet users to find an ISP with good customer service — knowledgeable, friendly people to call when there is a problem. If you are satisfied with your current long distance carrier, there's no reason not to choose them as your ISP. These providers consistently rank high in Internet customer service surveys — and have the added ability to consolidate your billing (telephone and Internet in one).

Sprint Earthlink	800-746-3769
AT&T WorldNet	800-831-5259

After setting up your account over the phone, the ISP will mail a disk or CD including all of the required software and instructions you will need to set up your computer.

The Network News is distributed by Oncology Therapeutics Network Corporation.

The articles in this newsletter are not intended to serve as rules and policies for medical practice. Primary references should be consulted. The reader is encouraged to review the manufacturer's package insert where applicable.

Comments and suggestions are welcome. Address them to: Stasia Lord, Editor, The Network News; Oncology Therapeutics Network; 395 Oyster Point Blvd., Suite 405, So. San Francisco, CA 94080.

Printed on recycled paper.

OTN-Online Registration Form

ONCOLOGY THERAPEUTICS NETWORK

Directions:

1. Fill out all of the information requested.
2. Designate a main contact who can authorize the addition and removal of users.
3. Have one of the physicians or office managers in your practice sign the form.
4. Mail or Fax to:

Oncology Therapeutics Network
Attn: OTN-Online
395 Oyster Point Blvd., Suite 405
South San Francisco, CA 94080
Fax: 650-952-5643

Practice Information:

Practice Name: _____

Practice Address: _____

City: _____ State: _____ ZIP Code: _____

OTN Account Number: _____

Main Contact Information

Name: _____ Title: _____

Phone Number: _____ E-mail Address: _____

Select the method to be used by the Main Contact to manage users at this practice (check at least one):

☐ Mail with signature ☐ Phone authorization ☐ E-mail authorization

Secondary User Sign Up

Name	Phone	Site Location	E-mail	Security Level*	
				Level I	Level II
				Level I	Level II
				Level I	Level II
				Level I	Level II

* Two levels of basic security are used in OTN-Online. All main contacts will be given Level II access, which gives the user access to information for all practice sites (main sites and all satellite sites). Level I access gives the user information for a single site.

I understand that OTN-Online is a secured website and contains practice-specific drug and supply pricing and invoice information. I (or the Main Contact) am responsible for notifying OTN, in the methods I have outlined above, of any additions or deletions of the users who have access to this website.

Physician or Office Manager Signature: _____ Date: _____

Physician or Office Manager Name (please print): _____

BP 01156

10A

ONCOLOGY THERAPEUTICS NETWORK

NURSE'S CORNER

Debuting in this issue of *The Network News* is *Nurse's Corner*. We hope you'll find this column a useful reference on the clinical, social and psychological aspects of oncology nursing. If you'd like to be a guest author or have suggestions for future topics, please contact Stasia Lord, *The Network News* Editor at 1-800-482-6700.

Commonly Used Herbs

Georgia M. Decker
MS, RN, CS-ANP, AOCN

The use of herbs as a complementary therapy has increased in the past decade. In Europe and Asia, herbs are routinely prescribed in healthcare. In the United States, herbs are categorized as nutritional supplements and as such are not required to meet the FDA standards for drugs and are not routinely prescribed by healthcare professionals. There are many reasons for the resurgence of interest in complementary therapies. Some of these were described in an earlier issue of *The Network News* (July/August 1998). Commercial products will vary in the amount of standardized extract and impact recommended dosage. Purity of the product is also of concern. Some of the most commonly used single agents are described in this column.

Ginko Biloba

Plant part used: leaves
Active ingredients:
- Ginko flavone 24%
- Terpene Lactone 6%

Actions:
- Reduces capillary fragility
- Inhibits platelet aggregation
- Antioxidant

Indications for use:
- Cerebral Vascular Insufficiency — dementia, vertigo, tinnitus, chronic depression (geriatric)
- Peripheral Vascular Disease

Usual dosages:
- Cerebral Vascular Insufficiency — 120-240 mg/day in 2-3 divided doses
- Peripheral Vascular Insufficiency — 120-160 mg/day in 2-3 divided doses

Side Effects/Contraindications:
- Mild gastrointestinal upset (less than 1%)
- Mild, transient headache for first 1-3 days
- No known drug interactions

Garlic

Plant part used: bulb
Active ingredients:
- Allicin (produced when bulb is crushed)

Actions:
- Lowers cholesterol
- Lowers triglycerides
- Inhibits platelet aggregation

Indications for use:
- Hypercholesteremia
- Hyperlipidemia
- Helpful as an adjuvant for anti-clotting drugs (should not be used as primary therapy and should be used as adjuvant only under the direction of a knowledgeable healthcare professional)

Usual dosages:
- To decrease cholesterol and/or triglycerides — 600-900 mg/day in 2-3 divided doses as garlic powder tablets or chew one clove of fresh garlic each day

Side Effects/Contraindications:
- Heartburn
- Flatulence
- Take with caution if on anti-coagulant therapy

Chamomile

Plant part used: dried flowers
Active ingredients:
- Flowers contain 1-25 volatile oils, alpha bisabolol, alpha bisabolol oxides A and B, and matricin bioflavinoids

Actions:
- Anti-inflammatory
- Antispasmodic
- Muscle relaxing effect on gastrointestinal tract*

*Helpful for long-term management, but not a substitute for medical treatment for acute attacks

Indications for use:
- Irritable bowel syndrome
- Indigestion
- Gastritis
- Peptic ulcer disease
- Spastic colon
- Cramping related to diarrhea

Usual dosages:
- Usually consumed as tea 3-4 times a day between meals; or, 2-3 grams/day of encapsulated product; or, 1/2-1 tsp. of tincture added to hot water

Side Effects/Contraindications:
- Rare allergic reactions
- Persons with allergies to ragweed, asters, and chrysanthemums should avoid use
- Not a substitute for medical treatment for acute gastrointestinal symptoms

Ginger

Plant parts used: the rhizome
Active ingredients:
- 1-4% volatile oils; zingiberene and bisabolene
- Glycerols and shogaols

Actions:
- Stimulates digestion
- Increases gastric motility
- Improves the production and secretion of bile from the liver and gallbladder
- Helpful in protecting the stomach from the effects of NSAIDs
- Anti-emetic

Indications for use:
- Motion sickness
- Nausea and vomiting post-anesthesia

Usual dosages:
- Not to exceed 1 gm/day during pregnancy
- *Motion sickness* — 1 gram 20-25 minutes prior to leaving on trip or onset of activity/ not to exceed 4 grams/day at least 2 hour intervals

Continued on next page

- *Nausea/vomiting*—1 gram 20 minutes prior to anesthesia

Side Effects/Contraindications:
- No side effects noted when guidelines are followed
- Persons with gallstones should consult with their healthcare provider before using
- Long-term use in pregnancy is not recommended

Milk Thistle

Plant part used: seeds of dried flowers

Active ingredients:
- Silymarin
- Silibinnin (subcomponent of silymarin)

Actions:
- Liver protection (against toxins and liver toxic medications)
- Antioxidant in liver cells
- Liver cell regeneration

Indications for use:
- Chronic liver disease (including alcoholism)
- Viral hepatitis (not as primary therapy)

Usual dosages:
- 420 mg/day in 3 divided doses x 8 weeks and then reduce to 280 mg/day in 2-3 divided doses for all diagnoses

Side Effects/Contraindications:
- No known interaction with medications
- May cause a mild, transient diarrhea (related to liver and gallbladder stimulation)

Echinacea

Plant parts used:
- Expressed juice or encapsulated dried juice of the E. purpurea herb roots of E. angustifolia and E. purpurea

Actions:
- Immune enhancement
- Increased phagocytosis
- Rise in T cell activity
- Rise in interferon

Indications for Use:
- Colds and flu
- As adjunctive therapy with recurrent infections

Side Effects/Contraindications:
- No reported side effects
- Echinacea is contraindicated in persons with autoimmune illnesses and other progressive systemic diseases. Echinacea should not be taken by persons allergic to flowers of the daisy (compositae) family due to cross hypersensitivity

St. John's Wort

Plant parts used: flowering tops

Active ingredients:
- Hypericin
- Pseudohypericin
- Tannins

Actions:
- Weakly inhibits the enzyme monoamine oxidase (MAO); how is unclear, but hypericin does not act alone
- Serotonin uptake inhibitor—"Nature's Prozac"
- Hypericin has a known antiviral effect

Indications for use:
- Mild to moderate depression

Usual dosages:
- Dosage is based upon the concentration on hypericin in the extract
- A standardized extract of 0.2% hypericin would be 500 mg/day in 2 divided doses
- A standardized extract of 0.3% hypericin would be 900 mg/day in 3 divided doses

Side Effects/Contraindications:
- No known toxicities
- Photosensitivity has occurred (avoid ultraviolet light)
- Avoid tyramine-containing foods (alcohol) and medications (tyramine, amphetamines, over-the-counter cold and flu remedies)
- Fatigue
- Pruritis
- Weight gain
- Dizziness
- Dry mouth
- St. John's Wort should not be taken concomitantly with prescription antidepressants

Saw Palmetto

Plant part used: berries of the plant

Active ingredients:
- Free fatty acids and sterols (in the oil of the berry)

Actions:
- Blocks estrogen and progesterone receptors
- Anti-inflammatory activity in the prostate

Indications for use:
- Benign prostatic hyperplasia (BPH)
- Urinary symptoms from BPH

Usual dosages:
- Best used in stage I or II BPH at 320 mg of the fat-soluble extract in 2 divided doses daily
- Efficacy can be evaluated after 8 weeks of continuous use
- Long-term use is usually indicated

Side Effects/Contraindications:
- Because of estrogen and progesterone blocking effect it should no be used in women of childbearing age or children
- No known drug interactions
- Mild gastrointestinal disturbances (rare)

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Ginseng

Plant part used: root

Active ingredients:
- Most modern extracts standardize according to percentage of ginsenosides
- Actually a complex of different constituents

Actions:
- Ginseng is an herbal adaptogen. Adaptogens, by definition, must show nonspecific effect and raise the powers of resistance to toxins; must effect a normalizing action; must not influence normal body functions. Helps the body deal with the effects of stress

Indications for use:
- Chronic fatigue syndrome
- Anxiety
- Depression
- Hypercholesterolemia
- Drug and alcohol withdrawal
- Fatigue (mental or physical)

Usual dosage:
- Extracts of 5-7% ginsenosides. The recommended dose is a 100 mg 1-2x day taken for 2-3 weeks, then a 1-2 week period with no herb taken as a "rest"

Side Effects/Contraindications:
- Overstimulation (especially if taken with caffeine)
- Gastrointestinal upset
- Insomnia (especially if taken with caffeine)
- Contraindicated in persons with hypertension
- Long-term use may cause breast tenderness and menstrual abnormalities
- Ginseng Abuse Syndrome—characterized by hypertension, nervousness, insomnia, diarrhea
- Potential estrogenic effect—should not be taken by persons with estrogen-dependent tumors

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3. Tyler, V.E. (1993). The honest herbal: A sensible guide to the use of herbs and related remedies. New York: Pharmaceutical Products Press.

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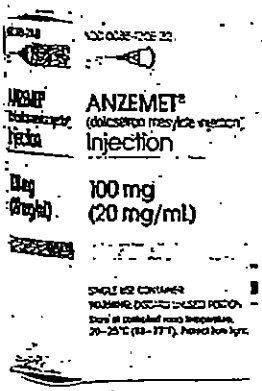
Anzemet®

dolasetron mesylate *injection/tablets*

Hoechst Marion Roussel's 5-HT_3 Receptor Antagonist

Excellent Efficacy and Safety Profile

- **Anzemet Injection** is indicated for the prevention of nausea and vomiting associated with initial and repeat courses of emetogenic cancer chemotherapy, including high-dose cisplatin.
- **Anzemet Tablets** are indicated for the prevention of nausea and vomiting associated with moderately emetogenic cancer chemotherapy, including initial and repeat courses.
- **Ease of Administration** — Anzemet injection can be safely infused intravenously as rapidly as 100 mg/30 seconds or diluted in compatible IV solutions and infused over 15 minutes.



For more information on dosing and administration, please contact your HMR account representative.

Great Value!

CATALOG NUMBER	NDC	BRAND NAME	ITEM	UNIT SIZE	ORDER QTY	PRICE/ UNIT	AWP
900-250	0088-1206-32	Anzemet	dolasetron mesylate	100 mg vial	1	$70.00	$149.88
970-300	0088-1203-05	Anzemet	dolasetron mesylate	100 mg tablets	5	$289.75	$330.00
970-305	0088-1203-29	Anzemet	dolasetron mesylate	100 mg tablets blister pack	5	$289.75	$330.00
970-310	0088-1203-43	Anzemet	dolasetron mesylate	100 mg tablets unit dose	10	$579.50	$660.00

Outstanding Support:

Reimbursement and Patient Assistance Program Hotline 1-888-895-2219

Call the Anzemet Hotline for help with reimbursement and patient assistance programs, Monday through Friday, between 10 a.m. and 6 p.m. ET.

Call OTN today at 1-800-482-6700 to place your order!

Visit the website! www.anzemet.com

BP 01159 10A

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HCPCS Code Changes for 1999

The HCFA Common Procedure Coding System (HCPCS) editorial panel recently announced coding changes effective for Medicare claims beginning January 1, 1999. Services provided on or after January 1, 1999, should be filed using the 1999 codes.

Services rendered in 1998 should continue to be billed with the 1998 codes. HCFA has granted a grace period to allow physicians to incorporate the changes into their practices.

The 1999 charges received prior to April 1, 1999 may be filed with either the 1998 or 1999 codes.

Specific questions about these codes and requests for a complete list of code changes should be directed to your Medicare carrier.

NEW	DELETE	BILLING UNITS	PRODUCT
J0130		10 mg	Abciximab, Injection
J0151		90 mg	Adenosine, Injection
J0275			Alprostadil, urethral suppository
J0285		50 mg	Amphotericin B, Injection
J0286		50 mg	Amphotericin B lipid complex, Injection
J0395		1 mg	Arbutamine HCL, Injection
J0476		50 mcg	Baclofen intrathecal trial, Injection
J7513		25 mg	Daclizumab, Parenteral
J9151		10 mg	Daunorubicin Citrate, Liposomal Formulation
J1260		1 mg	Dolasetron Mesylate, Injection

New J-Code for Anzemet® Effective 1/1/99!

NEW	DELETE	BILLING UNITS	PRODUCT
J7320		16 mg	Hylan G-F 20, for Intra Articular Injection
J9212		1 mcg	Interferon Alfacon-1, Recombinant, Injection
J1956		250 mg	Levofloxacin, Injection
J2271		100 mg	Morphine Sulfate, Injection
J2355		5 mg	Oprelvekin, Injection
J2994		37.6 mg	Reteplase, Injection
J2792		100 IU	Rho D Immune Globulin, Intravenous, Human, Solvent Detergent, Injection
J7315		20 mg	Sodium Hyaluronate for Intra-Articular Injection

OTN Holiday Schedule

Oncology Therapeutics Network will observe the 1998/99 seasonal holidays on the following days:

Thursday, November 26
Friday, December 25
Friday, January 1

Customer Service will be available to take your orders on all other days from 8:30 a.m.–8:30 p.m. ET.

Please order early to ensure an adequate supply of products to your organization and those that you serve.

ONCOLOGY THERAPEUTICS NETWORK

Rebetron™

Schering®

A combination of Rebetol (Ribavirin, USP) Capsules and Intron® A (Interferon alfa-2b, recombinant) indicated for the treatment of chronic hepatitis C in patients who have relapsed following alpha interferon therapy.

CATALOG NUMBER	NDC	BRAND NAME	ITEM	UNIT SIZE	PRICE/ UNIT	AWP
220-300	0085-1241-01	Rebetron	Interferon alpha-2b/Ribavirin 1200/Pak 3	3 MIU/0.5 mL	$645.00	$720.00
220-310	0085-1236-01	Rebetron	Interferon alpha-2b/Ribavirin 1200 MDV	22.8 MIU/3.8 mL; 3 MIU/0.5 mL	$645.00	$720.00
220-320	0085-1241-02	Rebetron	Interferon alpha-2b/Ribavirin 1000/Pak 3	3 MIU/0.5 mL	$584.00	$651.59
220-330	0085-1236-02	Rebetron	Interferon alpha-2b/Ribavirin 1000 MDV	22.8 MIU/3.8 mL; 3 MIU/0.5 mL	$584.00	$651.59
220-340	0085-1241-03	Rebetron	Interferon alpha-2b/Ribavirin 600/Pak 3	3 MIU/0.5 mL	$478.00	$533.64
220-350	0085-1236-03	Rebetron	Interferon alpha-2b/Ribavirin 600 MDV	22.8 MIU/3.8 mL; 3 MIU/0.5 mL	$478.00	$533.64
220-305	0085-1258-01	Rebetron	Interferon alpha-2b/Ribavirin 1200/3 MIU Pen	6 doses x 3 MIU/0.2 mL	$645.00	$720.00
220-325	0085-1258-02	Rebetron	Interferon alpha-2b/Ribavirin 1000/3 MIU Pen	6 doses x 3 MIU/0.2 mL	$584.00	$651.59
220-345	0085-1258-03	Rebetron	Interferon alpha-2b/Ribavirin 600/3 MIU Pen	6 doses x 3 MIU/0.2 mL	$478.00	$533.64

Intron® A — HSA-Free and Original Formulation

Interferon alfa-2b, recombinant*

CATALOG NUMBER	NDC	HCPCS CODE	ITEM	UNIT SIZE	ORDER QTY	PRICE/ UNIT	AWP
HSA-FREE SOLUTION*							
220-151	0085-1184-01	J9214	Intron A solution	3 MIU/0.5 mL	1	$31.30	$34.93
220-161	0085-1191-01	J9214	Intron A solution	5 MIU/0.5 mL	1	$52.15	$58.21
220-171	0085-1179-01	J9214	Intron A solution	10 MIU/1 mL	1	$104.40	$116.44
220-191	0085-1168-01	J9214	Intron A solution	18 MIU/MDV	1	$187.90	$209.58
220-194	0085-1133-01	J9214	Intron A solution	25 MIU/MDV	1	$261.00	$291.11
HSA-FREE SOLUTION PAKS* (Paks include six vials, six syringes, and six alcohol swabs)							
220-156	0085-1184-02	J9214	Intron A solution, Pak-3	3 MIU	6	$31.30	$34.93
220-166	0085-1191-02	J9214	Intron A solution, Pak-5	5 MIU	6	$52.15	$58.21
220-174	0085-1179-02	J9214	Intron A solution, Pak-10	10 MIU	6	$104.40	$116.44
ORIGINAL FORMULATIONS**							
220-150	0085-0647-03	J9214	Intron A powder	3 MIU/MDV	1	$31.30	$34.93
220-160	0085-0120-02	J9214	Intron A powder	5 MIU/MDV	1	$52.15	$58.21
220-170	0085-0571-02	J9214	Intron A powder	10 MIU/MDV	1	$104.40	$116.44
220-186	0085-1110-01	J9214	Intron A powder	18 MIU/MDV	1	$187.90	$209.58
220-175	0085-0285-02	J9214	Intron A powder	25 MIU/MDV	1	$261.00	$291.11
220-180	0085-0539-01	J9214	Intron A powder	50 MIU/MDV	1	$522.00	$582.17

* HSA-free formulation is recommended for intramuscular, subcutaneous, or intralesional administration. Intron A solutions for injection are not recommended for IV administration.
** Original formulation is recommended for intramuscular, subcutaneous, intralesional, or intravenous administration.

Intron® A Interferon alfa-2b, recombinant for injection Multidose Pen

CATALOG NUMBER	NDC	BRAND NAME	ITEM	UNIT SIZE	PRICE/ UNIT	AWP
220-158	0085-1242-01	Intron A Multidose Pen	Interferon alpha-2b, 6 doses	3 MIU Pen	$187.80	$209.58
220-310	0085-1236-01	Intron A Multidose Pen	Interferon alpha-2b, 6 doses	5 MIU Pen	$312.90	$349.31
220-320	0085-1241-02	Intron A Multidose Pen	Interferon alpha-2b, 6 doses	10 MIU Pen	$625.80	$698.62

ONCOLOGY THERAPEUTICS NETWORK

Schering Hotlines

Stay Informed! Schering has provided the following toll-free numbers and websites for you and your patients:

PROGRAM NAME	800#	WEBSITES	INFORMATION
American Liver Foundation	1-800-GO-LIVER (465-4837)		Liver and Hepatitis
Hepatitis Liver Hotline	1-888-4HEP-ABC (443-7222)		Hepatitis
Be In Charge	1-888-HEP-2608 (437-2608)	www.beincharge.com	Hepatitis
CareNection	1-888-EULEXIN (385-3946)	www.prostate-cancer.com	Prostate Cancer
Commitment to Care	1-800-521-7157		Hepatitis
Consultant Care Network	1-800-640-2144		Hepatitis
Crossing Bridges	1-888-77Bridge(274343)	www.crossingbridges.com	Melanoma
HEP C Connection	1-800-522-HEPC (4372)		Hepatitis
Hepatitis Help Line (general information)	1-800-700-8700		Hepatitis
Melanoma Hotline	1-800-237-4724		Melanoma
		www.skin-cancer.com	Skin Cancer

LEUKINE® Liquid (GM-CSF, sargramostim)

From Immunex Corporation IMMUNEX®

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- ✓ Bioequivalent to Lyophilized Powder
- ✓ LEUKINE Liquid Quick Reference Guide Available from Immunex
- ✓ Multi-Dose Vial
- ✓ Saves Time
- ✓ Less Waste and Saves Money

CATALOG NUMBER	NDC	ITEM	UNIT SIZE	PRICE/ UNIT	AWP
222-116	58406-0050-30	GM-CSF (sargramostin), solution	500 mcg MDV	$210.25	$252.06

Choice of Payment Terms

Only through OTN! Customers have four payment terms options:

- 1% 30, Net 60 Days
- 2% Upon Receipt of Order
- Net 75 Days
- Credit Card, Upon Receipt of Order

Reimbursement Support

Contact the Immunex Reimbursement Hotline at

1-800-321-4669

Bill for Leukine with J2820 per 50 mcg.

ONCOLOGY THERAPEUTICS NETWORK

ONCOLOGY DRUG UPDATES

Trastuzumab (Herceptin™, Genentech): A New Monoclonal Antibody for Metastatic Breast Cancer

Cindy W. Hamilton, Pharm.D.
Principal of Hamilton House in Virginia Beach, Virginia, and Clinical Instructor at Virginia Commonwealth University School of Pharmacy in Richmond, Virginia.

Trastuzumab was recently approved for the treatment of metastatic breast cancer by the Food and Drug Administration (FDA) in near-record time. Patient advocacy groups, encouraged by trastuzumab's apparent efficacy in clinical trials, convinced the FDA to shave 6 weeks off its 6-month review schedule. Trastuzumab's reputation is also benefiting from broad coverage by the press and endorsements from investigators.

Trastuzumab is a monoclonal antibody directed against the 185-kd transmembrane glycoprotein receptor ($p185^{HER2}$) encoded by the HER2 gene, also known as *neu* and *c-erbB-2*. HER2 is overexpressed in 25% to 30% of human breast cancers and correlates with poor clinical outcome. Trastuzumab is produced by recombinant DNA technology and has been humanized to minimize immunogenicity.

According to labeling, trastuzumab "in combination with paclitaxel is indicated for the treatment of patients with metastatic breast cancer whose tumors overexpress the HER2 protein and who have not received chemotherapy for their metastatic disease." Trastuzumab is also indicated as a single agent for patients who have failed previous chemotherapy. These indications are based on two large trials. The exact findings differ depending on the source; abstracts from the 1998 Meeting of the American Society of Clinical Oncology (ASCO) are used in this article unless otherwise indicated.

Clinical Trials

Adding trastuzumab to first-line chemotherapy significantly improved the response rate and increased the time to progression compared with chemotherapy alone (Table 1). At the ASCO meeting, Slamon and colleagues reported a significant survival benefit, which was not yet apparent when the abstract was prepared. In this phase III trial (Slamon et al, 1998), 469 women with metastatic breast cancer that overexpressed HER2 were randomized to receive chemotherapy alone or with trastuzumab. Chemotherapy consisted of doxorubicin (or epirubicin) and cyclophosphamide, or, if patients had received adjuvant anthracycline therapy, paclitaxel. The benefit of trastuzumab as measured by improved response rate and time to progression was greater in patients who received paclitaxel than in those who received an anthracycline and cyclophosphamide, but differences between these two subgroups were not significant (Slamon et al, 1998).

The lower response rate for paclitaxel alone may be attributable to the excess of poor prognostic factors at baseline, such as premenopausal status, estrogen- or progesterone-receptor negative tumors, and positive lymph nodes. Furthermore, all patients enrolled in the clinical trial program had a poor prognosis because of HER2 overexpression.

In the phase II trial (Cobleigh et al, 1998), trastuzumab produced objective responses in 15% (95% CI: 10%, 20%) of 213 women with metastatic breast cancer that overexpressed HER2. In an invited discussion of HER2 abstracts, Edison Liu told ASCO attendees that this response rate, together with the 9-month duration of response, rivals that of some of the best agents currently in use. The response criteria were rigorously defined and confirmed by an independent committee. Furthermore, all patients had been treated for metastatic disease; many were heavily pretreated

Continued on next page

Table 1.

Benefit of Adding Trastuzumab to First-Line Chemotherapy in a Randomized Phase III Trial of Women with Metastatic Breast Cancer Overexpressing HER2

Treatment Group	No. of Patients Enrolled	Objective Response Rate (%)	Median Time to Progression (mo)	Severe Adverse Events (%)
Chemotherapy				
Alone	234	36	5.5	
Plus trastuzumab	235	62*	8.6†	
Anthracycline + cyclophosphamide				
Alone	145	42	6.5	
Plus trastuzumab	146	65	9.0	
Paclitaxel				
Alone	89	25	4.2	
Plus trastuzumab	89	57	7.1	

*P<.001. †P<.01. Adapted from Slamon et al, 1988.

Trastuzumab *continued from previous page*

with 68% having previously received at least two regimens and 9% having received high-dose therapy.

Safety and Administration

Trastuzumab appears to be well tolerated. The most common adverse event is a symptom complex, which usually consists of chills and/or fever with or without other symptoms; it occurs in 40% of patients during the first infusion and does not usually recur with subsequent treatments. Trastuzumab is also associated with cardiac dysfunction, which resembles anthracycline-induced congestive heart failure (CHF) and is usually reversible. In the phase II trial (Cobleigh et al, 1998), trastuzumab monotherapy caused at least a 10% decrease in cardiac ejection fraction in nine patients (4%); six (3%) were symptomatic. In the phase III trial by Slamon et al, the incidence of grade-3 or -4 cardiac dysfunction was higher with trastuzumab, anthracycline, and cyclophosphamide (18%) than with anthracycline and cyclophosphamide (3%), trastuzumab and paclitaxel (2%), or paclitaxel alone (0%). The FDA advisory committee voted against combining trastuzumab with anthracyclines and cyclophosphamide, but advocacy groups preferred less restrictive labeling to facilitate reimbursement for therapy. The FDA compromised by not listing any known contraindications in the labeling. Instead, a boxed warning states that trastuzumab "administration can result in the development of ventricular dysfunction and heart failure." Studies are being conducted to identify risk factors for developing CHF, such as interactions with specific combination regimens.

HER2 overexpression is measured on a scale of 0 to 3+ by a test that was developed by the Danish company Dako. Response to treatment is most likely with overexpression at 3+, but patients with 2+ overexpression were also enrolled in clinical trials. Clinical trials will be conducted to examine the efficacy of trastuzumab in breast cancer with 2+ overexpression and even in tumors that do not overexpress HER2.

Conclusions

Trastuzumab represents an innovative alternative for patients with metastatic breast cancer that overexpresses HER2. When combined with first-line chemotherapy, trastuzumab improves response rates, increases time to progression, and improves survival times. When used as monotherapy in patients with previously treated metastatic disease, trastuzumab produces durable objective responses. Patients should be closely monitored for signs and symptoms of CHF. Ongoing trials will determine whether additional precautions are needed and whether the indications will be expanded to, for example, the adjuvant setting.

References

1. Cobleigh MA, Vogel CL, Tripathy D, et al. Efficacy and safety of Herceptin™ (humanized anti-HER2 antibody) as a single agent in 222 women with HER2 overexpression who relapsed following chemotherapy for metastatic breast cancer (abstract 376). *Proc Am Soc Clin Oncol.* 1998;17:97a.
2. Slamon DJ, Leyland-Jones B, Shak S, et al. Addition of Herceptin™ (humanized anti-HER2 antibody) to first line chemotherapy for HER2 overexpressing metastatic breast cancer (HER2+/MBC) markedly increases anticancer activity: a randomized, multinational controlled phase III trial (abstract 377). *Proc Am Soc Clin Oncol.* 1998;17:98a.
3. Genentech *Herceptin* approval meets patient group deadline; *Herceptin* label does not rule out co-administration with anthracyclines. *FDC Reports "The Pink Sheet."* 1998;60(40):3-5.

Capecitabine (Xeloda™, Roche Laboratories Inc.): Therapy for Breast Cancer

Nancy C. Phillips, RPh

The use of fluorouracil (5-FU), a cytotoxic agent commonly used to treat a variety of malignancies, is limited by its poor oral absorption and schedule-dependent effects. Continuous-infusion 5-FU has been used in an attempt to increase the activity of this agent, but it requires the use of indwelling vascular catheters and infusion devices. Another approach to increasing exposure to 5-FU is the use of oral products that are either pro-drugs of 5-FU or agents that inhibit the degradation of 5-FU within the gastrointestinal tract.

On April 30, 1998, capecitabine, one of the 5-FU pro-drugs, received accelerated FDA approval for the treatment of patients with metastatic breast cancer resistant to both paclitaxel (Taxol®) and an anthracycline-containing regimen or "resistant to paclitaxel and for whom further anthracycline therapy is not indicated."[1]

Continued on next page

Table 1.

Dose Calculation of Capecitabine According to Body Surface Area[5]

Dose (2,500 mg/m²/d)		No. of Tablets to be Taken With Each Dose (AM and PM)	
Surface Area (m²)	Total Daily Dose* (mg)	150 mg	500 mg
≤1.24	3,000	0	3
1.25–1.36	3,300	1	3
1.37–1.51	3,600	2	3
1.52–1.64	4,000	0	4
1.65–1.76	4,300	1	4
1.77–1.91	4,600	2	4
1.92–2.04	5,000	0	5
2.05–2.17	5300	1	5
≥2.18	5,600	2	5

* Total daily dose divided by 2 to allow equal morning and evening doses.
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Capecitabine *continued from previous page*

Capecitabine is a tumor-activated and tumor-selective carbamate that is orally active and has dose-linear pharmacokinetics. Following administration, it is converted in tumor tissue to 5-FU by a sequence of three steps. The final conversion in this sequence is mediated by the tumor-associated angiogenic factor, thymidine phosphorylase (dThdPase), reported to be upregulated in hypoxic areas of tumors.

Budman and colleagues evaluated capecitabine in a phase I trial of 33 solid-tumor patients.[2] The maximally tolerated dose was 1,657 mg/m²/d. The dose-limiting toxicities were similar to those associated with the use of long-term 5-FU infusions, including hand-foot syndrome (palmar-plantar erythrodysesthesia), mucositis, and diarrhea.

O'Shaughnessy and colleagues compared capecitabine 2,510 mg/m² administered orally in two divided doses on days 1 through 14 every 3 weeks with cyclophosphamide, methotrexate, and fluorouracil (CMF) administered every 3 to 4 weeks in a randomized, open-label, multicenter, phase II trial of 95 metastatic breast cancer patients.[3] The objective response rates (complete plus partial) were similar between the two groups (25% vs. 16%, respectively), as was the median time to progression (132 vs. 94 days, respectively). Capecitabine caused more grade 3 or 4 toxicity than did CMF, primarily because of an increased incidence of hand-foot syndrome and diarrhea.

Blum and colleagues studied capecitabine as third- or fourth-line therapy in 162 patients with metastatic breast cancer refractory to paclitaxel.[4] The oral dosage administered was again 2,510 mg/m² in two divided doses on days 1 through 14 every 3 weeks. The objective response rate was 20%, the median duration of objective response was 8.1 months, and the median overall survival time was 12.8 months. Diarrhea (14%) and hand-foot syndrome (10%), were the only drug-related grade 3 or 4 adverse events reported in at least 10% of patients.

The recommended dose of capecitabine is 2,500 mg/m²/d administered with food for 2 weeks, followed by a 1-week rest. This cycle should be repeated every 3 weeks. The daily dose should be divided into two doses, administered approximately 12 hours apart. Capecitabine is supplied as 500 mg and 150 mg tablets. Table 1 lists the total daily dose according to body surface area and the number of tablets to be taken with each dose. Table 2 recommends dose modifications according to grade of toxicity.[5]

In summary, capecitabine is the first 5-FU pro-drug to become commercially available in the United States. It appears to be active in patients resistant to intravenous 5-FU, anthracyclines, and taxanes. Randomized phase III trials comparing capecitabine with standard regimens for patients with breast or colorectal cancer are currently being planned or are under way. Other oral fluorinated pyrimidines including UFT (uracil and tegafur), BOF-A2, doxifluridine, emituracil and oral 5-FU, and S-1 are currently under investigation and should be available in the near future.

References

1. *F-D-C Reports-Pink Sheet.* 1997;60(27):3.
2. Budman DR, Meropol NJ, Reigner B, et al. Preliminary studies of a novel oral fluoropyrimidine carbamate: capecitabine. *J Clin Oncol.* 1998;16:1795-1802.
3. Blum JL, Buzdar AU, LoRusso PM, et al. A multicenter phase II trial of Xeloda™ (capecitabine) in paclitaxel-refractory metastatic breast cancer (MBC). *Proc Am Soc Clin Oncol.* 1998;17:125a.
4. O'Shaughnessy J, Mokseyenko V, Bell D, et al. A randomized phase II study of Xeloda™ (capecitabine) vs CMF as first line chemotherapy of breast cancer in women aged ≥55 years. *Proc Am Soc Clin Oncol.* 1998;17:103a.
5. Xeloda™ [package insert]. Nutley, NJ: Roche Laboratories Inc. April, 1998.

Table 2.

Recommended Dose Modifications for Capecitabine[5]

Toxicity NCIC Grades*	During a Course of Therapy	Dose Adjustment for Next Cycle (% of Starting Dose)
Grade 1		
	Maintain dose level	Maintain dose level
Grade 2		
1st Appearance	Interrupt until resolved to grade 0–1	100
2nd Appearance	Interrupt until resolved to grade 0–1	75
3rd Appearance	Interrupt until resolved to grade 0–1	50
4th Appearance	Discontinue treatment permanently	
Grade 3		
1st Appearance	Interrupt until resolved to grade 0–1	75
2nd Appearance	Interrupt until resolved to grade 0–1	50
3rd Appearance	Discontinue treatment permanently	
Grade 4		
1st Appearance	Discontinue permanently or if physician deems it to be in the patient's best interest to continue, interrupt until resolved to grade 0–1	50

* National Cancer Institute of Canada Common Toxicity Criteria used except for hand-foot syndrome.
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Average Wholesale Prices and 1998 HCPCS Codes

The Average Wholesale Prices (AWPs) and HCPCS codes for drugs commonly used in cancer treatment are provided for your use as a reimbursement resource. Products are listed alphabetically by their generic name. The AWPs are obtained from the *1998 Red Book* and the *November 1998 Red Book Update*. For drugs that have multiple manufacturers, the AWP for the product most commonly stocked by OTN is listed. For ease of use, we list the AWP information in the first three columns and the billing code and units in the right two columns. Please refer to the *Sourcebook* for a complete listing of HCPCS codes.

PRODUCT	VIAL SIZE	NDC	NOVEMBER AWP/VIAL	'98 HCPCS CODE	BILLING UNITS
Aldesleukin®					
Aldesleukin, pwd (Interleukin-2)	22 MIU	53905-0991-01	501.35	J9015	per 22 MIU
Ethyol®					
Amifostine	500 mg	17314-7253-03	339.08	J0207	per 500 mg
Fungizone®					
Amphotericin B Oral Suspension	24 mL	00087-1162-10	26.25	J9999*/J3490*	
Blenoxane®					
Bleomycin sulfate, pwd	15 units	00015-3010-20	304.60	J9040	per 15 units
	30 units	00015-3063-01	609.20	J9040	per 15 units
Xeloda					
Capecitabine	150 mg	00004-1100-51	230.59		
	500 mg	00004-1101-16	1,537.27		
Paraplatin®					
Carboplatin, pwd	50 mg	00015-3213-30	100.11	J9045	per 50 mg
	150 mg	00015-3214-30	300.29	J9045	per 50 mg
	450 mg	00015-3215-30	900.86	J9045	per 50 mg
BiCNU®					
Carmustine, pwd w/diluent	100 mg	00015-3012-38	99.55	J9050	per 100 mg
Tagamet®					
Cimetidine HCl, sol (150 mg/mL)	300 mg	00108-5017-16	3.96	J9999*/J3490*	
Platinol®-AQ					
Cisplatin, sol (1 mg/mL)	50 mg MDV	00015-3220-22	210.89	J9062	per 50 mg
	100 mg MDV	00015-3221-22	421.76	J9062	per 50 mg
Leustatin®					
Cladribine, sol (1 mg/mL)	10 mg	59676-0201-01	516.00	J9065	per 1 mg
Cytogam					
Cytomegalovirus immunoglobulin intravenous human	50 mL	60574-3101-01	511.44	J0850	per vial
Cytoxan® Lyophilized					
Cyclophosphamide, lyophilized	100 mg	00015-0539-41	6.45	J9093	per 100 mg
	200 mg	00015-0546-41	12.25	J9094	per 200 mg
	500 mg	00015-0547-41	25.71	J9095	per 500 mg
	1 g	00015-0548-41	51.43	J9096	per 1 g
	2 g	00015-0549-41	102.89	J9097	per 2 g
Cytoxan® Tablets					
Cyclophosphamide, tablets, 25 mg	100 per bottle	00015-0504-01	193.91	J8530	25 mg
Cyclophosphamide, tablets, 50 mg	100 per bottle	00015-0503-01	355.86	J8530	25 mg
Cyclophosphamide, tablets, 50 mg	1,000 per bottle	00015-0503-02	3,389.44	J8530	25 mg
Cytarabine, pwd	100 mg	00364-2467-53	6.00	J9100	per 100 mg
	100 mg	55390-0131-10	6.25	J9100	per 100 mg
	500 mg	00364-2468-54	23.06	J9110	per 500 mg
	500 mg	55390-0132-10	25.00	J9110	per 500 mg
	1 g	55390-0133-01	50.00	J9110	per 500 mg
	2 g	55390-0134-01	98.90	J9110	per 500 mg
DTIC-Dome®					
Dacarbazine, pwd	100 mg	00026-8151-10	13.83	J9130	per 100 mg
	200 mg	00026-8151-20	22.23	J9140	per 200 mg
DaunoXome®					
Daunorubicin citrate liposome inj. (1 mg/mL)	50 mg	56146-0301-01	311.50	J9999*/J3490*	per 10 mg
Cerubidine®					
Daunorubicin HCl, pwd	20 mg	55390-0281-10	168.50	J9150	per 10 mg
DDAVP®					
Desmopressin Acetate, sol (4 mcg/mL)	1 mL	00075-2451-01	26.69	J2597	per 4 mcg
Dexamethasone, sol (10 mg/mL)	100 mg MDV	00364-2360-54	12.00	J1100	up to 4 mg/mL
Dexamethasone, sol (4 mg/mL)	20 mg MDV	00517-4905-25	2.19	J1100	up to 4 mg/mL
	120 mg MDV	00517-4930-25	7.84	J1100	up to 4 mg/mL
Zinecard™					
Dexrazoxane for injection	250 mg	00013-8715-62	152.39	J1190	per 250 mg
	500 mg	00013-8725-89	304.76	J1190	per 250 mg
Diazepam, sol (5 mg/mL)	10 mg	00364-0825-48	3.60	J3360	up to 5 mg
	50 mg	00364-0825-54	18.15	J3360	up to 5 mg
Diphenhydramine HCl, sol (10 mg/mL)	300 mg	00364-6530-56	7.51	J1200	up to 50 mg
Diphenhydramine HCl, sol (50 mg/mL)	500 mg MDV	00364-6531-54	9.00	J1200	up to 50 mg
	50 mg	00641-0376-25	0.74	J1200	up to 50 mg

REIMBURSEMENT

PRODUCT	VIAL SIZE	NDC	NOVEMBER AWP/VIAL	'98 HCPCS CODE	BILLING UNITS
Taxotere®					
Docetaxel for injection	20 mg	00075-8001-20	270.83	J9170	per 20 mg
	80 mg	00075-8001-80	1,083.26	J9170	per 20 mg
Anzemet®					
Dolasetron mesylate, sol (20 mg/mL)	5 mL	00088-1206-3	149.88	J3490*	per 100 mg
Rubex®					
Doxorubicin, pwd	50 mg	00015-3352-22	197.15	J9000	per 10 mg
	100 mg	00015-3353-22	394.29	J9000	per 10 mg
Bedford Laboratories					
Doxorubicin, pwd	10 mg	55390-0231-10	45.08	J9000	per 10 mg
	20 mg	55390-0232-10	90.16	J9000	per 10 mg
	50 mg	55390-0233-01	225.40	J9000	per 10 mg
Doxorubicin, sol (2 mg/mL)	10 mg	55390-0235-10	47.35	J9000	per 10 mg
	20 mg	55390-0236-10	94.70	J9000	per 10 mg
	50 mg	55390-0237-01	236.74	J9000	per 10 mg
	200 mg MDV	55390-0238-01	945.98	J9000	per 10 mg
Adriamycin™					
Doxorubicin, RDF pwd	10 mg	00013-1086-91	48.76	J9000	per 10 mg
	20 mg	00013-1096-94	92.00	J9000	per 10 mg
	50 mg	00013-1106-79	243.80	J9000	per 10 mg
	150 mg MDV	00013-1116-83	716.76	J9000	per 10 mg
Doxorubicin, pfs sol (2 mg/mL)	10 mg	00013-1136-91	51.21	J9000	per 10 mg
	20 mg	00013-1146-94	102.43	J9000	per 10 mg
	50 mg	00013-1156-79	256.06	J9000	per 10 mg
	75 mg	00013-1176-87	384.09	J9000	per 10 mg
	200 mg MDV	00013-1166-83	1,003.75	J9000	per 10 mg
DOXIL®					
Doxorubicin, HCl liposome inj. (2mg/mL)	20 mg	61471-0295-12	656.25	J9999*	
Procrit®					
Epoetin alfa	2,000 units/ mL	59676-0302-01	24.00	Q0136*	1,000 units
	3,000 units/ mL	59676-0303-01	36.00	Q0136*	1,000 units
	4,000 units/ mL	59676-0304-01	48.00	Q0136*	1,000 units
	10,000 units/ mL	59676-0310-01	120.00	Q0136*	1,000 units
	20,000 units/ 1 mL MDV	59676-0320-01	240.00	Q0136*	1,000 units
	20,000 units/ 2 mL MDV	59676-0312-01	240.00	Q0136*	1,000 units
VePesid® Capsules					
Etoposide, capsules, 50 mg	20 per box	00015-3091-45	751.60	J8560	50 mg
VePesid® For Injection					
Etoposide, injection (20 mg/mL)	100 mg MDV	00015-3095-20	136.49	J9182	per 100 mg
	150 mg MDV	00015-3084-20	204.74	J9182	per 100 mg
	500 mg MDV	00015-3061-20	665.38	J9182	per 100 mg
	1 gm MDV	00015-3062-20	1,296.64	J9182	per 100 mg
Etopophos®					
Etoposide phosphate for injection	100 mg	00015-3404-20	124.14	J9999*	per 100 mg
Fludara®					
Fludarabine phosphate, pwd	50 mg	50419-0511-06	221.88	J9185	per 50 mg
Fluorouracil, sol (50 mg/mL)	500 mg	39769-0012-10	3.75	J9190	per 500 mg
	2,500 mg	00013-1046-94	14.58	J9190	per 500 mg
	5,000 mg	39769-0012-90	25.00	J9190	per 500 mg
Neupogen®					
G-CSF (Filgrastim), sol (0.3 mg/mL)	300 mcg	55513-0530-10	165.30	J1440	per 300 mcg
	480 mcg	55513-0546-10	263.30	J1441	per 480 mcg
Gemzar®					
Gemcitabine HCl	200 mg	00002-7501-01	85.43	J9201	per 200 mg
	1 g	00002-7502-01	427.15	J9201	per 200 mg
Leukine®					
GM-CSF (Sargramostim), lyophilized	250 mcg	58406-0002-33	126.04	J2820	per 50 mcg
• Leukine Liquid® (Sargramostim), solution	500 mcg	58406-0050-30	252.06	J2820	per 50 mcg
Zoladex®					
Goserelin acetate, implant	3.6 mg syringe	00310-0960-36	439.24	J9202	per 3.6 mg
	10.8 mg syringe	00310-0961-30	1,317.74	J9202	per 3.6 mg
Kytril®					
Granisetron HCl, sol (1 mg/mL)	1 mL	00029-4149-01	177.40	J1626	per 100 mcg
	4 mL	00029-4152-01	709.60	J1626	per 100 mcg
Ifex®					
• Ifosfamide	1 g	00015-0556-41	134.15	J9208	per 1 g
•	3 g	00015-0557-41	402.49	J9208	per 1 g
Ifex®/Mesnex™					
• Ifosfamide (10 x 1 g)/mesna (10 x 1 g MDV)	Combo-Pack	00015-3554-27	2,244.08	J9208/J9209	
• Ifosfamide (2 x 3 g)/mesna (6 x 1 g MDV)	Combo-Pack	00015-3564-15	1,346.38	J9208/J9209	
• Ifosfamide (5 x 1 g)/mesna (3 x 1 g MDV)	Combo-Pack	00015-3556-26	928.70	J9208/J9209	
Venoglobulin I					
Immune globulin intravenous, 5% pwd w/IV set	2.5 g	49669-1602-01	152.05	J1561	per 500 mg
	5 g	49669-1603-01	304.10	J1561	per 500 mg
	10 g	49669-1604-01	608.20	J1561	per 500 mg
Venoglobulin S					

REIMBURSEMENT

PRODUCT	VIAL SIZE	NDC	NOVEMBER AWP/VIAL	'98 HCPCS CODE	BILLING UNITS
Immune globulin intravenous, 5% sol w/IV set	2.5 g	49669-1612-01	225.00	J1561	per 500 mg
	5 g	49669-1613-01	450.00	J1561	per 500 mg
	10 g	49669-1614-01	900.00	J1561	per 500 mg
Immune globulin intravenous, 10% sol w/IV set	5 g	49669-1622-01	475.00	J1562	per 5 g
	10 g	49669-1623-01	950.00	J1562	per 5 g
	20 g	49669-1624-01	1,900.00	J1562	per 5 g
Immune globulin intravenous, 10% sol w/IV set	1 g	00192-0649-12	75.00	J1561	per 500 mg
	5 g	00192-0649-20	375.00	J1562	per 5 g
	10 g	00192-0649-71	750.00	J1562	per 5 g
	20 g	00192-0649-24	1,500.00	J1562	per 5 g
	1 g	00026-0648-12	90.00		
	5 g	00026-0648-20	450.00		
	10 g	00026-0648-71	900.00		
	20 g	00026-0648-24	1,800.00		
Immune globulin intravenous, 5%-10% w/IV set	2.5 g	52769-0471-72	168.93	J1561 or J1562	
	5 g	52769-0471-75	337.86	J1561 or J1562	
	10 g	52769-0471-80	675.72	J1561 or J1562	
Rho D immune globulin intravenous	300 mcg	60492-0082-01	306.00	J3490*/J9999*	
	1,000 mcg	60492-0024-01	1,020.00	J3490*/J9999*	
Intron® A					
Interferon alfa-2b, solution HSA-free	3 MIU	00085-1184-01	34.93	J9214	per 1 MIU
	3 MIU PAK	00085-1184-02	34.93	J9214	per 1 MIU
	5 MIU	00085-1191-01	58.21	J9214	per 1 MIU
	5 MIU PAK	00085-1191-02	58.21	J9214	per 1 MIU
	10 MIU	00085-1179-01	116.44	J9214	per 1 MIU
	10 MIU PAK	00085-1179-02	116.44	J9214	per 1 MIU
	18 MIU MDV	00085-1168-01	209.58	J9214	per 1 MIU
	25 MIU MDV	00085-1133-01	291.11	J9214	per 1 MIU
Interferon alfa-2b, pwd.	3 MIU MDV	00085-0647-03	34.93	J9214	per 1 MIU
	5 MIU MDV	00085-0120-02	58.21	J9214	per 1 MIU
	10 MIU MDV	00085-0571-02	116.44	J9214	per 1 MIU
	18 MIU MDV	00085-1110-01	209.58	J9214	per 1 MIU
	25 MIU MDV	00085-0285-02	291.11	J9214	per 1 MIU
	50 MIU MDV	00085-0539-01	582.17	J9214	per 1 MIU
Roferon® A					
Interferon alfa 2a, pwd w/3 mL diluent	18 MIU	00004-1993-09	197.56	J9213	per 3 MIU
Interferon alfa 2a, sol (3 MIU/mL)	3 MIU	00004-2009-09	34.97	J9213	per 3 MIU
Interferon alfa 2a, sol (6 MIU/mL)	6 MIU	00004-2007-09	69.91	J9213	per 3 MIU
Interferon alfa 2a, sol (10 MIU/mL)	9 MIU	00004-2010-09	98.44	J9213	per 3 MIU
Interferon alfa 2a, sol (6 MIU/mL)	18 MIU	00004-2011-09	209.60	J9213	per 3 MIU
Interferon alfa 2a, sol (36 MIU/mL)	36 MIU	00004-2012-09	419.26	J9213	per 3 MIU
Camptosar®					
• Irinotecan HCl injection, CPT-11 (20 mg/mL)	2 mL	00009-7529-02	220.76	J9206	per 20 mg
	5 mL	00009-7529-01	551.93	J9206	per 20 mg
Leucovorin, pwd	50 mg	55390-0051-10	18.44	J0640	per 50 mg
	50 mg	58406-0621-05	21.53	J0640	per 50 mg
	100 mg	55390-0052-10	35.00	J0640	per 50 mg
	100 mg	58406-0622-06	39.41	J0640	per 50 mg
	200 mg	55390-0053-01	78.00	J0640	per 50 mg
	350 mg	58406-0623-07	137.94	J0640	per 50 mg
Lupron®					
• Leuprolide acetate depot, susp. (7.5 mg/mL)	7.5 mg	00300-3629-01	594.65	J9217	per 7.5 mg
•	22.5 mg	00300-3346-01	1,783.95	J9217	per 7.5 mg
Lorazepam, sol (2 mg/mL)	2 mg MDV	00008-0581-04	9.85	J2060	per 2 mg
Lorazepam, sol (2 mg/mL)	20 mg MDV	00008-0581-01	87.74	J2060	per 2 mg
Lorazepam, sol (4 mg/mL)	40 mg MDV	00008-0570-01	109.66	J2060	per 2 mg
Lorazepam, sol (2 mg/mL), w/ syringe	2 mg	00008-0581-02	10.39	J2060	per 2 mg
Manhitol, 25% sol	50 mL	00074-4031-01	5.29	J2150	per 50 ml
Mustargen®					
Mechlorethamine HCl, pwd.	10 mg	00006-7753-31	10.48	J9230	per 10 mg
Megace®					
Megestrol acetate, tablets, 20 mg	100 per bottle	00015-0595-01	75.68		
Megestrol acetate, tablets, 40 mg	100 per bottle	00015-0596-41	134.96		
	250 per bottle	00015-0596-46	330.68		
	500 per bottle	00015-0596-45	647.88		
Megace® Oral Suspension					
• Megestrol acetate, oral suspension	8 fl oz	00015-0508-42	131.96		
Alkeran®					
Melphalan hydrochloride, pwd	50 mg	00173-0130-93	333.28	J9245	per 50 mg
Melphalan hydrochloride, tablets, 2 mg	50 per bottle	00173-0045-35	95.12	J8600	2 mg
Mesnex™					
• Mesna, sol (100 mg/mL)	1 g MDV	00015-3563-02	174.30	J9209	per 200 mg
Methotrexate, pwd	20 mg	00205-4654-90	2.78	J9250	per 5 mg
	20 mg	58406-0671-01	5.03	J9250	per 5 mg
	1,000 mg	58406-0671-05	61.44	J9260	per 50 mg
Methotrexate, pres. free sol (25 mg/mL)	50 mg	55390-0031-10	6.88	J9260	per 50 mg
	100 mg	55390-0032-10	8.75	J9260	per 50 mg
	200 mg	55390-0033-10	17.50	J9260	per 50 mg

REIMBURSEMENT

ONCOLOGY THERAPEUTICS NETWORK

PRODUCT	VIAL SIZE	NDC	NOVEMBER AWP/VIAL	'98 HCPCS CODE	BILLING UNITS
Immune globulin intravenous, 5% sol w/IV set	2.5 g	49669-1612-01	225.00	J1561	per 500 mg
	5 g	49669-1613-01	450.00	J1561	per 500 mg
	10 g	49669-1614-01	900.00	J1561	per 500 mg
Immune globulin intravenous, 10% sol w/IV set	5 g	49669-1622-01	475.00	J1562	per 5 g
	10 g	49669-1623-01	950.00	J1562	per 5 g
	20 g	49669-1624-01	1,900.00	J1562	per 5 g
Immune globulin intravenous, 10% sol w/IV set	1 g	00192-0649-12	75.00	J1561	per 500 mg
	5 g	00192-0649-20	375.00	J1562	per 5 g
	10 g	00192-0649-71	750.00	J1562	per 5 g
	20 g	00192-0649-24	1,500.00	J1562	per 5 g
	1 g	00026-0648-12	90.00		
	5 g	00026-0648-20	450.00		
	10 g	00026-0648-71	900.00		
	20 g	00026-0648-24	1,800.00		
Immune globulin intravenous, 5%-10% w/IV set	2.5 g	52769-0471-72	168.93	J1561 or J1562	
	5 g	52769-0471-75	337.86	J1561 or J1562	
	10 g	52769-0471-80	675.72	J1561 or J1562	
Rho D Immune globulin intravenous	300 mcg	60492-0082-01	306.00	J3490*/J9999*	
	1,000 mcg	60492-0024-01	1,020.00	J3490*/J9999*	
Intron® A					
Interferon alfa-2b, solution HSA-free	3 MIU	00085-1184-01	34.93	J9214	per 1 MIU
	3 MIU PAK	00085-1184-02	34.93	J9214	per 1 MIU
	5 MIU	00085-1191-01	58.21	J9214	per 1 MIU
	5 MIU PAK	00085-1191-02	58.21	J9214	per 1 MIU
	10 MIU	00085-1179-01	116.44	J9214	per 1 MIU
	10 MIU PAK	00085-1179-02	116.44	J9214	per 1 MIU
	18 MIU MDV	00085-1168-01	209.58	J9214	per 1 MIU
	25 MIU MDV	00085-1133-01	291.11	J9214	per 1 MIU
Interferon alfa-2b, pwd	3 MIU MDV	00085-0647-03	34.93	J9214	per 1 MIU
	5 MIU MDV	00085-0120-02	58.21	J9214	per 1 MIU
	10 MIU MDV	00085-0571-02	116.44	J9214	per 1 MIU
	18 MIU MDV	00085-1110-01	209.58	J9214	per 1 MIU
	25 MIU MDV	00085-0285-02	291.11	J9214	per 1 MIU
	50 MIU MDV	00085-0539-01	582.17	J9214	per 1 MIU
Roferon® A					
Interferon alfa 2a, pwd w/3 mL diluent	18 MIU	00004-1993-09	197.56	J9213	per 3 MIU
Interferon alfa 2a, sol (3 MIU/mL)	3 MIU	00004-2009-09	34.97	J9213	per 3 MIU
Interferon alfa 2a, sol (6 MIU/mL)	6 MIU	00004-2007-09	69.91	J9213	per 3 MIU
Interferon alfa 2a, sol (10 MIU/mL)	9 MIU	00004-2010-09	98.44	J9213	per 3 MIU
Interferon alfa 2a, sol (6 MIU/mL)	18 MIU	00004-2011-09	209.60	J9213	per 3 MIU
Interferon alfa 2a, sol (36 MIU/mL)	36 MIU	00004-2012-09	419.26	J9213	per 3 MIU
Camptosar®					
• Irinotecan HCl injection, CPT-11 (20 mg/mL)	2 mL	00009-7529-02	220.76	J9206	per 20 mg
	5 mL	00009-7529-01	551.93	J9206	per 20 mg
Leucovorin, pwd	50 mg	55390-0051-10	18.44	J0640	per 50 mg
	50 mg	58406-0621-05	21.53	J0640	per 50 mg
	100 mg	55390-0052-10	35.00	J0640	per 50 mg
	100 mg	58406-0622-06	39.41	J0640	per 50 mg
	200 mg	55390-0053-01	78.00	J0640	per 50 mg
	350 mg	58406-0623-07	137.94	J0640	per 50 mg
Lupron®					
• Leuprolide acetate depot, susp. (7.5 mg/mL)	7.5 mg	00300-3629-01	594.65	J9217	per 7.5 mg
•	22.5 mg	00300-3346-01	1,783.95	J9217	per 7.5 mg
Lorazepam, sol (2 mg/mL)	2 mg MDV	00008-0581-04	9.85	J2060	per 2 mg
Lorazepam, sol (2 mg/mL)	20 mg MDV	00008-0581-01	87.74	J2060	per 2 mg
Lorazepam, sol (4 mg/mL)	40 mg MDV	00008-0570-01	109.66	J2060	per 2 mg
Lorazepam, sol (2 mg/mL), w/ syringe	2 mg	00008-0581-02	10.39	J2060	per 2 mg
Mannitol, 25% sol	50 mL	00074-4031-01	5.29	J2150	per 50 ml
Mustargen®					
Mechlorethamine HCl, pwd	10 mg	00006-7753-31	10.48	J9230	per 10 mg
Megace®					
Megestrol acetate, tablets, 20 mg	100 per bottle	00015-0595-01	75.68		
Megestrol acetate, tablets, 40 mg	100 per bottle	00015-0596-41	134.96		
	250 per bottle	00015-0596-46	330.68		
	500 per bottle	00015-0596-45	647.88		
Megace® Oral Suspension					
• Megestrol acetate, oral suspension	8 fl oz	00015-0508-42	131.96		
Alkeran®					
Melphalan hydrochloride, pwd	50 mg	00173-0130-93	333.28	J9245	per 50 mg
Melphalan hydrochloride, tablets, 2 mg	50 per bottle	00173-0045-35	95.12	J8600	2 mg
Mesnex®					
• Mesna; sol (100 mg/mL)	1 g MDV	00015-3563-02	174.30	J9209	per 200 mg
Methotrexate, pwd	20 mg	00205-4654-90	2.78	J9250	per 5 mg
	20 mg	58406-0671-01	5.03	J9250	per 5 mg
	1,000 mg	58406-0671-05	61.44	J9260	per 50 mg
Methotrexate, pres. free sol (25 mg/mL)	50 mg	55390-0031-10	6.88	J9260	per 50 mg
	100 mg	55390-0032-10	8.75	J9260	per 50 mg
	200 mg	55390-0033-10	17.50	J9260	per 50 mg

REIMBURSEMENT

PRODUCT	VIAL SIZE	NDC	NOVEMBER AWP/VIAL	'98 HCPCS CODE	BILLING UNITS
Methotrexate, sol w/pres. (25 mg/mL)	250 mg	55390-0034-10	26.88	J9260	per 50 mg
Methotrexate, tablets, 2.5 mg	50 mg	58406-0681-14	4.75	J9260	per 50 mg
	250 mg	58406-0681-17	20.48	J9260	per 50 mg
	100 per bottle	00555-0572-02	362.95	J8610	2.5 mg
	36 per bottle	00555-0572-35	130.05	J8610	2.5 mg
Metoclopramide, sol w/pres. (5 mg/mL)	2 mL	39769-0066-02	2.40	J2765	up to 10 mg
Metoclopramide, pres. free sol (5 mg/mL)	50 mg	00013-6116-95	8.73	J2765	up to 10 mg
	150 mg	00013-6126-95	23.54	J2765	up to 10 mg
Mutamycin® Mitomycin, pwd	5 mg	00015-3001-20	134.11	J9280	per 5 mg
	20 mg	00015-3002-20	452.91	J9290	per 20 mg
	40 mg	00015-3059-20	915.09	J9291	per 40 mg
Novantrone® Mitoxantrone, sol (2 mg/mL)	20 mg MDV	58406-0640-03	812.74	J9293	per 5 mg
	25 mg MDV	58406-0640-05	1,015.90	J9293	per 5 mg
	30 mg MDV	58406-0640-07	1,219.10	J9293	per 5 mg
Sandostatin® Octreotide Acetate, sol (50 mcg/mL)	50 mcg amp	00078-0180-03	5.21	J9999*/J3490*	
Octreotide Acetate, sol (100 mcg/mL)	100 mcg amp	00078-0181-03	9.54	J9999*/J3490*	
Octreotide Acetate, sol (500 mcg/mL)	500 mcg amp	00078-0182-03	43.62	J9999*/J3490*	
Zofran® Ondansetron HCl, sol (2 mg/mL)	40 mg MDV	00173-0442-00	244.43	J2405	per 1 mg
Ondansetron HCl, sol (2 mg/mL)	4 mg	00173-0442-02	24.45	J2405	per 1 mg
Ondansetron HCl, sol premixed (32 mg/50 mL D5W)	32 mg bag	00173-0461-00	206.41	J2405*	per 1 mg
Neumega® Oprelvekin	5 mg	58394-004-01	235.00	J3490*	per 5 mg
TAXOL® Paclitaxel, semi-synthetic sol (6mg/ml)	30 mg	00015-3475-30	182.63	J9265	per 30 mg
	100 mg	00015-3476-30	608.76	J9265	per 30 mg
	300 mg	00015-3479-11	1,826.25	J9265	per 30 mg
Aredia® Pamidronate disodium, pwd	30 mg	00083-2601-04	218.24	J2430	per 30 mg
	60 mg	00083-2606-01	428.97	J2430	per 30 mg
	90 mg	00083-2609-01	621.75	J2430	per 30 mg
Nipent™ Pentostatin, pwd	10 mg	62701-0800-01	1,645.00	J9268	per 10 mg
Prochlorperazine, sol (5 mg/mL)	10 mg	00364-2231-48	2.64	J0780	up to 10 mg
	50 mg MDV	00364-2231-54	13.00	J0780	up to 10 mg
Prochlorperazine, tablets, 10 mg	100 per box	00007-3367-20	94.50		
Zantac® Ranitidine, sol (50 mg/2 mL)	2 mL	00173-0362-38	3.99	J9999*/J3490*	
Respigam • Respiratory syncytial virus immunoglobulin, human	2 mL	60574-2102-01	427.82	J1565	per 50 mg
	50 mL	60574-2101-01	717.57	J1565	per 50 mg
Rituxan™ • Rituximab	100 mg	50242-050-21	421.35	J3490*/J9999*	per 100 mg
Zanosar® Streptozocin, pwd	1 g	00009-0844-01	96.51	J9320	per 1 g
Vumon® • Teniposide, 50 mg	5 mL amp	00015-3075-19	188.25	J9999*	per 50 mg
Thioplex® Thiotepa, pwd	15 mg	58406-0661-02	90.24	J9340	per 15 mg
Hycamtin™ Topotecan HCl lyoph pwd	4 mg	00007-4201-01	548.35	J9350	per 4 mg
	4 mg, 5s	00007-4201-05	548.35	J9350	per 4 mg
Herceptin • Trastuzumab	440 mg	50242-0134-60	2,262.50	J9999*/J3490*	
Neutrexin® • Trimetrexate glucuronate, pwd	25 mg, 10s ea.	58178-0020-10	660.00	J3305	per 25 mg
	25 mg, 50s ea.	58178-0020-50	660.00	J3305	per 25 mg
Urokinase, sol (5,000 IU/mL)	5,000 IU	00074-6111-01	56.26	J3364	per 5,000 IU
	9,000 IU	00074-6145-02	98.13	J3364	per 5,000 IU
Vinblastine sulfate, pwd	10 mg	55390-0091-10	21.25	J9360	per 1 mg
Vinblastine sulfate, sol (1 mg/mL)	10 mg	00364-2447-54	37.50	J9360	per 1 mg
	10 mg	00469-2780-30	43.23	J9360	per 1 mg
Vincristine, preservative free sol (1 mg/mL)	1 mg	00013-7456-86	37.08	J9370	per 1 mg
	1 mg	61703-0309-06	31.75	J9370	per 1 mg
	2 mg	00013-7466-86	74.13	J9375	per 2 mg
	2 mg	61703-0309-16	38.25	J9375	per 2 mg
Vincristine, preservative free sol (5 mg/mL)	50 mg	61703-0210-11	7.47	J9380	per 5 mg
	150 mg	61703-0210-31	20.30	J9380	per 5 mg
NAVELBINE® Vinorelbine tartrate, sol (10 mg/mL)	1 mL	00173-0656-01	66.35	J9390	per 10 mg
	5 mL	00173-0656-44	331.78	J9390	per 10 mg

• An AWP, HCPCS code or NDC that has changed or been added has been highlighted in color.

* The drug code J9999 is defined as "not otherwise classified, antineoplastic drug." The Health Care Financing Administration (HCFA) has not assigned specific codes to these drugs.

† The drug code J3490 is defined as "unclassified drug." These drugs may or may not be defined as an unclassified drug in your area. Consult your local carrier for the appropriate code.

‡ Q0136 is the code for non-ESRD (End Stage Renal Disease) use.

+ J2405 should be used for all formulations of Zofran.

ONCOLOGY THERAPEUTICS NETWORK
395 OYSTER POINT BLVD, SUITE 405
SOUTH SAN FRANCISCO, CA 94080

ONCOLOGY THERAPEUTICS NETWORK

March/April 1999

THE NETWORK NEWS

A BIMONTHLY UPDATE FOR COMMUNITY-BASED ONCOLOGY PROFESSIONALS

Route To:
- ☐ Physician
- ☐ Office Manager
- ☐ Oncology Nurse
- ☐ Pharmacist
- ☐ Business Office
- ☐ _____

IN THIS ISSUE

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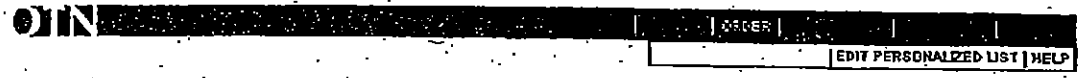
BP 01190

ONCOLOGY THERAPEUTICS NETWORK

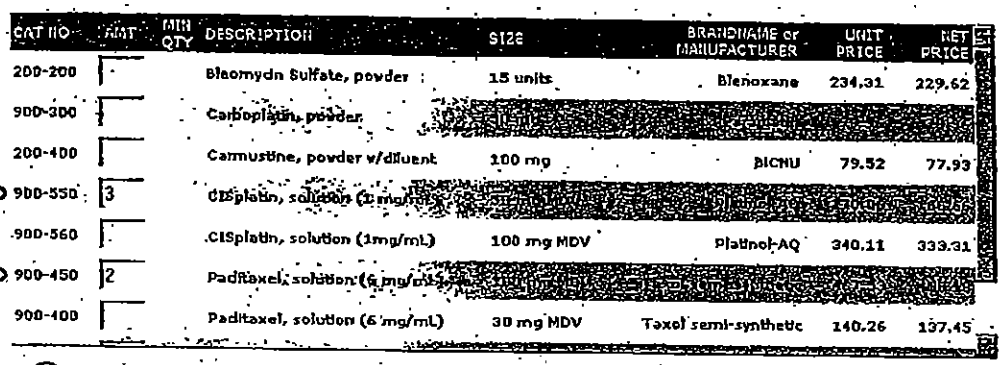
Now Available!

Online Ordering

otn-online.com



2. Place Order



CAT NO	AMT	MIN QTY	DESCRIPTION	SIZE	BRAND/NAME or MANUFACTURER	UNIT PRICE	NET PRICE
200-200			Bleomycin Sulfate, powder	15 units	Blenoxane	234.31	229.62
900-300			Carboplatin, powder				
200-400			Carmustine, powder w/diluent	100 mg	BICNU	79.52	77.93
900-550	3		CISplatin, solution (1 mg/mL)				
900-560			CISplatin, solution (1mg/mL)	100 mg MDV	Platinol-AQ	340.11	333.31
900-450	2		Paditaxel, solution (6 mg/mL)				
900-400			Paditaxel, solution (6 mg/mL)	30 mg MDV	Taxol semi-synthetic	140.26	137.45

CANCEL ORDER

Use this text box to order any additional items not found on your personalized order list.

teniposide

Continue onto Step 3 when you are finished ordering.

Comments and suggestions are welcome. Address them to: Stasia Lord, Editor, The Network News; Oncology Therapeutics Network; 395 Oyster Point Blvd., Suite 405, So. San Francisco, CA 94080.

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- ✓ Customized order form
- ✓ Inventory status
- ✓ Centralized ordering for multiple sites

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Five Easy Steps to Online Ordering

- ✓ **Step 1:** Review Order History. Check on the status of your orders to see whether or not they've been shipped — detailed summaries let you check what other people in your practice have already ordered.
- ✓ **Step 2:** Place Order. The list of products in the order section is customized to each practice. Your initial list contains every product that you've ordered from OTN in the last six months.
- ✓ **Step 3:** Confirm Order. Review or edit the items in your current order.
- ✓ **Step 4:** Confirm Shipping Information. P.O. numbers, delivery methods, and delivery dates.
- ✓ **Step 5:** Submit Order.

10A

BP 01191

REIMBURSEMENT ASSISTANCE

ONCOLOGY THERAPEUTICS NETWORK

Coding and Billing for Laboratory Services

Bobbi Buell, MBA, President, Documedics

Q: *Why is Medicare so picky about laboratory coding and billing?*

A: Medicare is concerned about over-utilization of laboratory testing. All physicians order laboratory testing, even if they don't charge directly for the tests. This means that millions of dollars are spent for these services. There is a concern that some of the payments to physician offices and independent labs are excessive. Thus, Medicare has focused on three areas: bundling, unbundling, and lack of medical necessity. If a physician or laboratory is found doing any or all of these, they can be subject to fraud and abuse penalties.

Q: *What is meant by bundling, unbundling, and lack of medical necessity?*

A: BUNDLING:
Applies mostly to chemistry panels. For example, the patient only needs and/or has an order for a glucose and potassium test; but, because the testing equipment reports sixteen laboratory tests, that is what is billed.

UNBUNDLING:
Means billing for separate tests that were actually not separately done or ordered. In oncology, the prime example of this is the billing of indices 85029-85030 with a complete blood count because the laboratory prints a matrix.

LACK OF MEDICAL NECESSITY:
Refers to a test that was not reasonable or necessary based upon the patient's condition or the documentation in the chart. A big concern here is billing for tests that are used for screening prior to diagnosis, like cholesterol tests in the absence of symptoms of hypercholesterolemia. Medicare does not pay for screening.

Q: *How do I bill correctly for laboratory services?*

A: Diagnosis coding is key. Regularly scan your carrier's bulletins for their diagnosis guidelines for chemistry tests and complete blood counts (CBCs). If the patient's diagnosis code does not meet these guidelines, you might check to see if you can use V58.1 (Encounter for chemotherapy) for your chemo patients. In many areas, this is an allowed diagnosis for blood counts and chemistries. If you are truly screening a Medicare patient without an acceptable diagnosis, have the patient sign an Advanced Beneficiary Notice (ABN) and charge them for the test. Be sure to bill the claim with a –GA modifier. Medicare does not pay for screening.

Q: *What information should be documented to justify laboratory testing?*

A: The following items should be documented in the chart:

- An order for the test: This means a specific order for the specific tests done. An order for a CHEM-16 or a SMAC-12 is not a legitimate order because no such tests have existed since 1997. Assure that physicians know the new terminology for chemistry panels, order tests individually, or check them off an order sheet.
- Documentation of a reason for the test: It is important to document the medical reason for the test. Most cancer patients do have a legitimate reason for these services. However, if the test is being performed in the absence of a diagnosis or an "accepted" (by the carrier) diagnosis, the patient should sign an Advanced Beneficiary Notice (ABN) and pay for the test. Do not force a diagnosis onto the bill that is not documented in the patient chart.
- Result of the test: This provides evidence that the test was actually performed. The result may be written or printed.

Q: *What billing patterns would trigger a Medicare audit?*

A: The most likely pattern to trigger a Medicare audit would be if you are billing for a greater number of tests or for more expensive tests than other oncologists in your area. The Office of Inspector General is focusing on CBCs with indices. Although you can no longer separately bill indices because of their deletion from CPT, you can still be held responsible for past behavior. This is particularly possible for tests done in your office lab.

Q: *What's new in laboratory coding for 1999?*

A: These coding changes will be effective for Medicare immediately or, at the latest, April 1, 1999.

- Bilirubins: The hepatic function panel 80058 now has SIX tests as opposed to five.
- Lab Panels: Carbon dioxide, "bicarb" 82374, has now been added to the chem panels and bilirubin direct 80054 has been subtracted.
- Reticulocytes: Blood count, reticulocytes, 85046 has been added as a single test.
- Indices: The most notable change for oncologists is the deletion of indices, 85029-85030.
- Modifier –QC: This modifier must still be used for CLIA-waivered tests.

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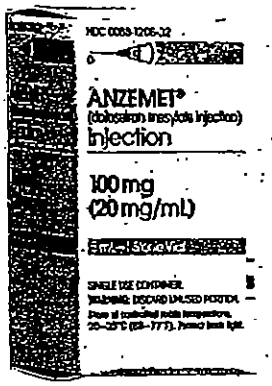

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970-300	0088-1203-05	Anzemet	dolasetron mesylate	100 mg tablets	5	$301.00	$343.20
970-305	0088-1203-29	Anzemet	dolasetron mesylate	100 mg tablets blister pack	5	$301.00	$686.40
970-310	0088-1203-43	Anzemet	dolasetron mesylate	100 mg tablets unit dose	10	$602.00	$686.40

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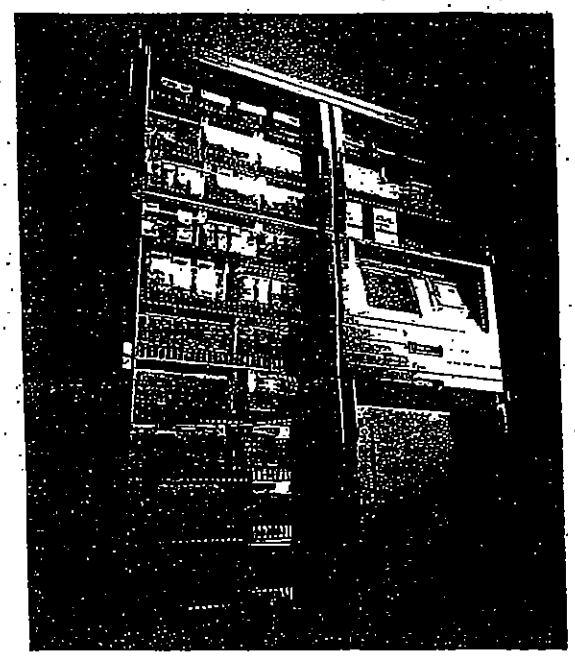

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CATALOG NUMBER	NDC	BRAND NAME	ITEM	UNIT SIZE	PRICE/ UNIT	AWP
220-300	0085-1241-01	Rebetron	Interferon alpha-2b/Ribavirin 1200/Pak 3	3 MIU/0.5 mL	$645.00	$720.00
220-310	0085-1236-01	Rebetron	Interferon alpha-2b/Ribavirin 1200 MDV	22.8 MIU/3.8 mL; 3 MIU/0.5 mL	$645.00	$720.00
220-320	0085-1241-02	Rebetron	Interferon alpha-2b/Ribavirin 1000/Pak 3	3 MIU/0.5 mL	$584.00	$651.59
220-330	0085-1236-02	Rebetron	Interferon alpha-2b/Ribavirin 1000 MDV	22.8 MIU/3.8 mL; 3 MIU/0.5 mL	$584.00	$651.59
220-340	0085-1241-03	Rebetron	Interferon alpha-2b/Ribavirin 600/Pak-3	3 MIU/0.5 mL	$478.00	$533.64
220-350	0085-1236-03	Rebetron	Interferon alpha-2b/Ribavirin 600 MDV	22.8 MIU/3.8 mL; 3 MIU/0.5 mL	$478.00	$533.64
220-305	0085-1258-01	Rebetron	Interferon alpha-2b/Ribavirin 1200/3 MIU Pen	6 doses x 3 MIU/0.2 mL	$645.00	$720.00
220-325	0085-1258-02	Rebetron	Interferon alpha-2b/Ribavirin 1000/3 MIU Pen	6 doses x 3 MIU/0.2 mL	$584.00	$651.59
220-345	0085-1258-03	Rebetron	Interferon alpha-2b/Ribavirin 600/3 MIU Pen	6 doses x 3 MIU/0.2 mL	$478.00	$533.64

Intron® A — HSA-Free and Original Formulation

Interferon alfa-2b, recombinant*

CATALOG NUMBER	NDC	HCPCS CODE	ITEM	UNIT SIZE	ORDER QTY	PRICE/ UNIT	AWP
HSA-FREE SOLUTION*							
220-151	0085-1184-01	J9214	Intron A solution	3 MIU/0.5 mL	1	$31.95	$34.93
220-161	0085-1191-01	J9214	Intron A solution	5 MIU/0.5 mL	1	$53.20	$58.21
220-171	0085-1179-01	J9214	Intron A solution	10 MIU/1 mL	1	$106.40	$116.44
220-191	0085-1168-01	J9214	Intron A solution	18 MIU/MDV	1	$191.55	$209.58
220-194	0085-1133-01	J9214	Intron A solution	25 MIU/MDV	1	$266.05	$291.11
HSA-FREE SOLUTION PAKS* (Paks include six vials, six syringes, and six alcohol swabs)							
220-156	0085-1184-02	J9214	Intron A solution, Pak-3	3 MIU	6	$31.95	$34.93
220-166	0085-1191-02	J9214	Intron A solution, Pak-5	5 MIU	6	$53.20	$58.21
220-174	0085-1179-02	J9214	Intron A solution, Pak-10	10 MIU	6	$106.40	$116.44
ORIGINAL FORMULATIONS**							
220-150	0085-0647-03	J9214	Intron A powder	3 MIU/MDV	1	$31.95	$34.93
220-160	0085-0120-02	J9214	Intron A powder	5 MIU/MDV	1	$53.20	$58.21
220-170	0085-0571-02	J9214	Intron A powder	10 MIU/MDV	1	$106.40	$116.44
220-186	0085-1110-01	J9214	Intron A powder	18 MIU/MDV	1	$191.55	$209.58
220-175	0085-0285-02	J9214	Intron A powder	25 MIU/MDV	1	$266.05	$291.11
220-180	0085-0539-01	J9214	Intron A powder	50 MIU/MDV	1	$532.10	$582.17

* HSA-free formulation is recommended for intramuscular, subcutaneous, or intralesional administration. Intron A solutions for injection are not recommended for IV administration.
** Original formulation is recommended for intramuscular, subcutaneous, intralesional, or intravenous administration.*

Intron® A Interferon alfa-2b, recombinant for injection Multidose Pen

CATALOG NUMBER	NDC	BRAND NAME	ITEM	UNIT SIZE	PRICE/ UNIT	AWP
220-158	0085-1242-01	Intron A Multidose Pen	Interferon alpha-2b, 6 doses	3 MIU Pen	$191.55	$209.58
220-168	0085-1235-01	Intron A Multidose Pen	Interferon alpha-2b, 6 doses	5 MIU Pen	$319.25	$349.31
220-178	0085-1254-01	Intron A Multidose Pen	Interferon alpha-2b, 6 doses	10 MIU Pen	$638.50	$698.62

ONCOLOGY THERAPEUTICS NETWORK

Intron® A Dosing Guide

INDICATION	RECOMMENDED DOSAGE	RECOMMENDED VIAL SIZE
*Chronic hepatitis C	3 MIU SC or IM TIW	3 MIU/0.5 mL or Pak-3 or 18 MIU MDV
Chronic hepatitis B	30 - 35 MIU/week SC or IM (5 MIU qd or 10 MIU TIW x 16 weeks)	5 MIU/0.5 mL or Pak-5 or 10 MIU/1.0 mL or Pak-10
Malignant melanoma	*Induction:* 20 MIU/m² IV 5 consecutive days/week x 4 weeks *Maintenance:* 10 MIU/m² TIW SC. x 48 weeks	50 MIU powder/1.0 mL 18 MIU powder/1.0 mL
Hairy-cell leukemia	2 MIU/m² SC or 1 MIU TIW	5 MIU/0.5 mL or Pak-5 or 10 MIU/1.0 mL or Pak-10 or 18 MIU MDV
AIDS-related Kaposi's sarcoma	30 MIU/m² SC or IM TIW	50 MIU/1.0 mL powder
Condylomata acuminata	1 MIU TIW (alternate days) x 3 weeks	5 MIU/0.5 mL or Pak-5 or 10 MIU/1.0 mL or Pak-10

*Rebetron™ combination therapy has been approved for naive patients and relapser patients with hepatitis C.

BODY WEIGHT	REBETOL CAPSULES	INTRON A INJECTION
≤ 75 kg	2x200-mg capsules a.m. 3x200-mg capsules p.m. daily p.o.	3 MIU 3 times weekly s.c.
> 75 kg	3x200-mg capsules a.m. 3x200-mg capsules p.m. daily p.o.	3 MIU 3 times weekly s.c.

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902-210	58406-0640-05	Novantrone (2 mg/mL)	25 mg MDV	1	$947.50	$1,015.90
902-220	58406-0640-07	Novantrone (2 mg/mL)	30 mg MDV	1	$1,138.00	$1,219.10

*Novantrone is a product in OTN's Price Matching Program

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ONCOLOGY THERAPEUTICS NETWORK

ONCOLOGY DRUG UPDATES

Chemotherapy Medication Error Prevention in the Oncology Setting

Dwight D. Kloth, Pharm.D., FCCP, BCPS, BCOP, Director of Pharmacy, Fox Chase Cancer Center

Medication error prevention is an important goal in all hospitals, ambulatory care clinics, and private-practice oncology offices. Organizations such as the American Society of Health-System Pharmacists (ASHP) have previously described that medication errors can occur in multiple ways and for many reasons. Although some errors may have negligible effects, this is not usually the case in the care of cancer patients. Medication error incidence rates, which are based largely on self-reporting programs existing in many institutions, range from 1% to 10% in hospitals and extended-care facilities. The outcome of these errors can range from the inconsequential to the catastrophic. In New York, extrapolation of statewide data from the mandatory medication error reporting program indicates that annually as many as 1,000 deaths in the United States are related to medication errors.

Cancer centers and private oncologists' offices, where patients receive treatment with cytotoxic drugs (including investigational agents) that have a narrow therapeutic index should be particularly concerned about the potential for medication errors. Medication errors can be multidisciplinary—everyone involved, including the physician, nurse, and pharmacist, believed that the order was correct, but it was not.

Primary causes for the error may involve a lack of information or the presence of misleading or incorrect information about the patient (e.g., incorrect height, weight, blood counts, estimates of renal or hepatic function) or the intended chemotherapy drug regimen. Adequate information is essential in the oncology setting for preventing medication errors involving chemotherapy. Other problems that cause or contribute to medication errors include a lack of knowledge of appropriate doses and strengths; lack of comprehensive reference sources; placement of drugs in incorrect storage locations; no reading of the label; poor or confusing labeling by the manufacturer (many drugs made by the same manufacturer are similarly packaged, especially different vial sizes of the same drug); mistakes in calculating the dose; erroneous transmission or reception of verbal orders; and administration of drug and/or dose inconsistent with the patient's diagnosis. Staff-related medication errors include poor staff selection, training, orientation, or supervision; excessive interruption of healthcare professionals while they are involved in drug preparation; or insufficient drug preparation space. Furthermore, errors can be introduced through inadequate communication: use of ambiguous abbreviations and acronyms; use of verbal orders rather than written, which even in the close confines of a private-practice office may be misunderstood; or illegible handwriting. Computer software is now available that may obviate the need for verbal-order communication and remove the potential for illegible handwriting. As computer order systems become more sophisticated and widely available, the margins of safety will grow.

Procedural changes that can provide medication error protection include careful attention to the amount of drug stored, storage of drugs with similar-sounding names in separate locations and use of extremely clear warning signs for drugs with similar sounding names (e.g., cisplatin and carboplatin; vincristine and vinblastine). Dosage labels should use a standardized format, ideally using the generic drug name and avoiding trade names. Abbreviations must be prohibited (e.g., Aredia and Adria look very similar when handwritten, and the dosage ranges are similar). In a private practice setting where nurses prepare chemotherapy, two practitioners should review each dose, as a safety double check. In addition, staff should become accustomed to using printed as opposed to handwritten labels. Labels for chemotherapy distinguishing chemotherapy from other drugs should be verified at least three times during drug preparation, and yet again before administration of the drug to the patient. The staff member should discuss the planned chemotherapy (including doses) whenever possible with patients so that the patient, and/or caregiver, can contribute to error prevention. Many patients are aware not only of the starting dose of their chemotherapy regimen but of dose modifications as well. Table 1 provides a list of "Do's" for writing medication/chemotherapy orders; Table 2, a list of "Don'ts." Both lists are based on order-writing guidelines from prominent cancer centers.

Although private-practice oncology offices may differ greatly from hospital practice (e.g., fewer physicians and fewer nurses involved, leading to greater familiarity; a busy oncology practice confronts the same challenges as hospital-based inpatient units or

Continued on next page

ambulatory infusion clinics in understanding the potential for medication errors and implementing procedures to reduce and eradicate this potential should be investigated by oncology offices.

Suggested Readings

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Table 1.
"Do's" for Writing Medication/Chemotherapy Orders

1.	Do always double check the dose against the protocol or a reputable publication.
2.	Do always use the full generic name of the drug.
3.	Do prescribe all drug doses clearly in terms of dose, e.g., microgram, milligram, gram.
4.	Do date all orders with month, day, and year.
5.	Do use a leading zero when the dose follows a decimal point; e.g., if the dose is less than one milligram, write 0.1 mg, not .1 mg.
6.	Do use BSA-based dosing, i.e., mg/m² or g/m², or, when applicable, mg/kg, including the daily dose and the specific number of days to be given. Do not write the course dose, unless the daily dose is written as well. For example, for a patient with a BSA of 1.5 m², cisplatin 20 mg/m² per day for 5 days = 30 mg per day for 5 days = 100 mg/m2/course = 150 mg/course.
7.	Do list a route of administration and infusion duration for intravenous solutions.
8.	Do include a current height, weight, and BSA with the chemotherapy order.
9.	Do print critical information such as drug names or doses.
10.	Do, before signing, double check all drugs and doses and verify that they are what the patient is intended to receive.
11.	Do make sure that the medication order sheet has the patient's name written on it, either by hand or addressograph plate. Do not write orders on a blank order sheet for subsequent stamping by addressograph plate.

BSA = body surface area.

Table 2.
"Don'ts" for Writing Medication/Chemotherapy Orders

1.	Don't designate drugs by brand names, nicknames, unusual company names, or abbreviations. "Aredia" (pamidronate), when written, could be misunderstood to be "Adria" (doxorubicin), the abbreviation often applied to Adriamycin.
2.	Don't use a trailing zero when writing an order; e.g., an order for 10.0 mg may be read as 100 mg.
3.	Don't use dangerous abbreviations. Using a "U" for units may be read as a "0"; e.g., "5U of insulin" could be misread as "50 of insulin," resulting in a 10-fold overdose.
4.	Don't refer to drugs by the common name of the drug class. For example, does "platinum" mean cisplatin or carboplatin?
5.	Don't use a soft-tip felt pen; e.g., when writing orders on multilayer carbonless paper, copies of the drug order may be illegible or invisible.
6.	Don't sign a blank copy of a medication order for an allied health professional to fill in later. Medication orders should reflect information directly intended and checked by the licensed prescriber.
7.	Don't give verbal orders for chemotherapy.
8.	Don't abbreviate "daily" as "qd," which has been mistaken for "qid." Similarly, Don't abbreviate every other day as "qod."
9.	Don't write drug orders in terms of number of ampules or vials. Drugs may come in more than one vial or ampule size, leading to administration of doses not intended by the prescriber. For example, doxorubicin, leucovorin and methotrexate all come in multiple vial sizes.

ONCOLOGY THERAPEUTICS NETWORK

ONCOLOGY DRUG UPDATES

Use of Alteplase (TPA) for Thrombosed Catheters — A Response to the Urgent Drug Warning Regarding Safety of Urokinase Issued by the FDA

Dwight D. Kloth, Pharm.D., FCCP, BCPS, BCOP, Director of Pharmacy, Fox Chase Cancer Center

Until recently, the thrombolytic agent urokinase (Abbokinase®, Abbott Laboratories), both the Open-Cath® 5,000-units vial size and the 250,000-units vial for systemic use, was in short supply nationwide because of an ongoing dispute between the manufacturer and the United States Food and Drug Administration (FDA). On January 25, 1999, the FDA gave Abbott permission to ship urokinase supplies to healthcare providers. Unknown to many healthcare practitioners at that time, and to many even now, is that on the same day the FDA allowed release of the drug, they also posted an "Important Drug Warning" letter on their website — *http://www.fda.gov/cber/ltr/abb012599.htm* (text version). The letter states "The FDA is recommending that Abbokinase be reserved for only those situations where a physician has considered the alternatives and has determined that the use of Abbokinase is critical to the care of a specific patient." This letter, which was not mailed to practitioners, warns that all commercially available lots of urokinase were produced using processes that, during a recent FDA inspection, were determined to have "numerous significant deviations from the Current Good Manufacturing Practice (CGMP) regulations designed to help assure product safety." The letter refers to the little known fact that commercially available urokinase is produced using kidney cells harvested after death from a population of human neonates at high risk of various infectious diseases. Therefore, urokinase has, at least potentially, the same risk factors (e.g., hepatitis B or cytomegalovirus transmission) as other blood-derived products. The FDA is critical of the screening efforts of Abbott's supplier, stating that neither the mother nor the neonate donors were screened regarding infectious disease status or hepatitis C virus (HCV). Furthermore, the FDA letter includes the following: "A viral inactivation procedure that substantially inactivates HIV and HCV in other biological products was used in the production of the currently available lots of Abbokinase. This process has variable effects on other infectious agents and has not been fully validated for viral inactivation of Abbokinase."

Why the FDA permitted the release of urokinase and on the same day issued but did not disseminate a warning about potential contamination is unclear. The FDA acknowledges that it is not aware of any cases of infectious disease attributable to commercial Abbokinase and indicates that the likelihood of infectious diseases being attributed to Abbokinase and reported to the FDA is low; thus, the true risk is unknown. The FDA letter also suggests use of alternative agents, providing a list of these commercially available thrombolytic agents and their FDA-approved uses. The letter closes by indicating that Abbott has committed to updating the labeling for Abbokinase to include the potential risk of infectious diseases and expeditiously correcting the deviations from CGMP.

For obvious medical and legal liability considerations, the Pharmacy and Therapeutics Committees of a number of hospitals, with consultation from infectious disease, infection control, risk management, hematology, interventional radiology, pulmonology, and

Continued on next page

nursing departments, have elected to switch to alternatives until this issue is resolved.

Other commercially available thrombolytic agents include streptokinase (Streptase®, Kabikinase®), anistreplase (Eminase®), and reteplase (Retavase®). Based on reports in the literature of a link between streptokinase and antibody formation, streptokinase may not be an ideal alternative. A literature search failed to yield references for anistreplase or reteplase for clearing thrombosed catheters, but it did produce several references for the use of alteplase (tissue plasminogen activator [TPA]: Activase®). Moreover, as a recombinant product, alteplase offers safety advantages over streptokinase.

To clear thrombosed catheters, alteplase 2 mg can be used instead of Abbokinase 5,000 to 10,000 units, based on studies comparing alteplase with Abbokinase and using an alteplase dose calculated to equal the ratio of Abbokinase Open-Cath to systemic doses of urokinase and equivalent dwell times. Results of several studies show that the efficacy of alteplase is equal to or better than that of urokinase when used with equivalent dwell times.[1,2] However, because alteplase is an extremely expensive medication, discarding the remaining 48 mg from the 50-mg vial used to clear a catheter is unfeasible. Therefore, frozen Alteplase in smaller, 2-mg doses, is needed for administration.[3] These doses of alteplase can be prepared by reconstituting the commercial 50-mg or 100-mg vials with the enclosed diluent. Using only the enclosed diluent is recommended because alteplase is incompatible with preservatives. The resulting concentration is 1 mg/mL and can be used to create 2 mg/2 mL doses or more diluted concentrations. Because the diluent contains no preservatives, it is vitally important that the 2 mg/2 mL solution be immediately compounded into syringes and then frozen. Doses can then be thawed out as needed or in daily batches based on anticipated need. According to Jaffe et. al,[3] frozen alteplase, stored at -70°C maintains its effectiveness for at least 1 year based on both clinical activity and solid-phase fibrin assay. Finally, Jaffe et. al[3] solidly support freezing solutions of alteplase, despite the manufacturer advising against this method.

Although the frozen method is not as quick and easy as using the Abbokinase Open-Cath, they represent a feasible alternative to Abbokinase while the healthcare community awaits resolution of FDA concerns.

References

1. Haire WD, Atkinson JB, Stephens LA, Kotulak GD. Urokinase versus recombinant tissue plasminogen activator in thrombosed central venous catheters: a double blinded randomized trial. *Thromb Haemost.* 1994;72:543-547.
2. Atkinson JB, Bagnall HA, Gomperts E. Investigational use of tissue plasminogen activator (t-PA) for occluded central venous catheters. *J Parenter Enteral Nutr.* 1990;14:310-311.
3. Jaffe GJ, Green GD, Abrams GW. Stability of recombinant tissue plasminogen activator. *Am J Ophthalmol.* 1989;108:90-91.

ONCOLOGY THERAPEUTICS NETWORK

ONCOLOGY DRUG UPDATES

ODAC Recommendations

The Food and Drug Administration's (FDA's) Oncologic Drugs Advisory Committee (ODAC) met in January 1999 and recommended approval of the following:

- Busulfex®, Orphan Medical (busulfan injection) as a conditioning agent in combination with cyclophosphamide before allogeneic stem cell transplantation for the treatment of chronic myelogenous leukemia (CML). Historically, oral busulfan has been used in transplantations with variable pharmacokinetic characteristics. Busulfex has a pharmacokinetic and safety profile similar to that of oral busulfan. Adverse events of Busulfex include profound myelosuppression, nausea, stomatitis, vomiting, anorexia, diarrhea, insomnia, and fever. The recommended dosage is 0.8 mg/kg (based on actual or ideal body weight, whichever is lower) as a 2-hour intravenous (IV) infusion every 6 hours for 16 doses, over 4 consecutive days. Because Busulfex can cross the blood-brain barrier and induce seizures, all patients should be pre-medicated with phenytoin.

FDA Approvals

Zofran® ODT™, Glaxo Wellcome, Inc. (ondansetron orally disintegrating tablets) received FDA approval on January 27, 1999, for prevention of chemotherapy– and radiation therapy–induced nausea and vomiting and prevention of postoperative nausea and vomiting. Zofran ODT is available as a strawberry-flavored, 4- or 8-mg tablet, which disintegrates instantly when placed on a patient's tongue and does not require water to help a patient swallow. Common adverse events of Zofran ODT include headache, diarrhea, constipation, fever, and fatigue.

The FDA also granted accelerated approval of Ontak®, Ligand Pharmaceutical, Inc. denileukin diftitox on February 5, 1999, a fusion protein of diphtheria toxin and interleukin-2 (IL-2). Ontak is used for the treatment of persistent or recurrent cutaneous T-cell lymphoma (CTCL), the malignant cells of which express the CD25 component of the IL-2 receptor. Ontak targets both malignant cells and normal lymphocytes; therefore patients are at risk of infections. Other adverse events of Ontak include flu-like symptoms, acute hypersensitivity-type reactions, nausea and vomiting, and vascular leak syndrome. The recommended dosage of Ontak for CTCL treatment is 9 or 18 mg/kg/d IV infusion over 5 days every 3 weeks. The duration of therapy was debated by the ODAC members, and the committee voted in favor of allowing physicians to determine the appropriate dose and number of courses for each patient.

Average Wholesale Prices and 1999 HCPCS Codes

The Average Wholesale Prices (AWPs) and HCPCS codes for drugs commonly used in cancer treatment are provided for your use as a reimbursement resource. Products are listed alphabetically by their generic name. The AWPs are obtained from the *1999 Red Book* and the *March 1999 Red Book Update*. For drugs that have multiple manufacturers, the AWP for the product most commonly stocked by OTN is listed. For ease of use, we list the AWP information in the first three columns and the billing code and units in the two right columns. Please refer to the *Sourcebook* for a complete listing of HCPCS codes.

PRODUCT	VIAL SIZE	NDC	MARCH AWP/VIAL	'99 HCPCS CODE	BILLING UNITS
Proleukin®					
Aldesleukin, pwd (Interleukin-2)	22 MIU	53905-0991-01	557.50	J9015	per 22 MIU
Ethyol®					
Amifostine	500 mg	17314-7253-03	339.08	J0207	per 500 mg
Fungizone®					
Amphotericin B Oral Suspension	24 mL	00087-1162-10	26.25	J9999*/J3490*	
Blenoxane®					
Bleomycin sulfate, pwd	15 units	00015-3010-20	304.60	J9040	per 15 units
	30 units	00015-3063-01	609.20	J9040	per 15 units
Xeloda®					
Capecitabine	150 mg	00004-1100-51	230.59		
	500 mg	00004-1101-16	1,537.27		
Paraplatin®					
Carboplatin, pwd	50 mg	00015-3213-30	100.11	J9045	per 50 mg
	150 mg	00015-3214-30	300.29	J9045	per 50 mg
	450 mg	00015-3215-30	900.86	J9045	per 50 mg
BiCNU®					
Carmustine, pwd w/diluent	100 mg	00015-3012-38	99.55	J9050	per 100 mg
Tagamet®					
Cimetidine HCl, sol (150 mg/mL)	300 mg	00108-5017-16	3.96	J9999*/J3490*	
Platinol®-AQ					
Cisplatin, sol (1 mg/mL)	50 mg MDV	00015-3220-22	210.89	J9062	per 50 mg
	100 mg MDV	00015-3221-22	421.76	J9062	per 50 mg
Leustatin®					
Cladribine, sol (1 mg/mL)	10 mg	59676-0201-01	541.28	J9065	per 1 mg
Cytogam®					
Cytomegalovirus immunoglobulin intravenous, human	50 mL	60574-3101-01	511.44	J0850	per vial
Cytoxan® Lyophilized					
Cyclophosphamide, lyophilized	100 mg	00015-0539-41	6.45	J9093	per 100 mg
	200 mg	00015-0546-41	12.25	J9094	per 200 mg
	500 mg	00015-0547-41	25.71	J9095	per 500 mg
	1 g	00015-0548-41	51.43	J9096	per 1 g
	2 g	00015-0549-41	102.89	J9097	per 2 g
Cytoxan® Tablets					
Cyclophosphamide, tablets, 25 mg	100 per bottle	00015-0504-01	193.91	J8530	25 mg
Cyclophosphamide, tablets, 50 mg	100 per bottle	00015-0503-01	355.86	J8530	25 mg
Cyclophosphamide, tablets, 50 mg	1,000 per bottle	00015-0503-02	3,389.44	J8530	25 mg
Cytarabine, pwd	100 mg	55390-0131-10	6.25	J9100	per 100 mg
	500 mg	55390-0132-10	25.00	J9110	per 500 mg
	1 g	55390-0133-01	50.00	J9110	per 500 mg
	2 g	55390-0134-01	98.90	J9110	per 500 mg
DTIC-Dome®					
Dacarbazine, pwd	100 mg	00026-8151-10	13.83	J9130	per 100 mg
	200 mg	00026-8151-20	22.23	J9140	per 200 mg
DaunoXome®					
Daunorubicin citrate liposome inj. (1 mg/mL)	50 mg	56146-0301-01	311.50	J9999*/J3490*	per 10 mg
Cerubidine®					
Daunorubicin HCl, pwd	20 mg	55390-0281-10	168.50	J9150	per 10 mg
DDAVP®					
Desmopressin Acetate, sol (4 mcg/mL)	1 mL	00075-2451-01	26.69	J2597	per 4 mcg
Dexamethasone, sol (4 mg/mL)	20 mg MDV	00517-4905-25	2.19	J1100	up to 4 mg/mL
	120 mg MDV	00517-4930-25	7.84	J1100	up to 4 mg/mL
Zinecard™					
Dexrazoxane for injection	250 mg	00013-8715-62	158.49	J1190	per 250 mg
	500 mg	00013-8725-89	316.95	J1190	per 250 mg
• Diphenhydramine HCl, sol (50 mg/1 mL)	1 mL amp w/syringe	00071-4259-03	15.24	J1200	
• Diphenhydramine HCl, sol (50 mg/1 mL)		00071-4259-45	16.84	J1200	
Taxotere®					
Docetaxel for injection	20 mg	00075-8001-20	284.36	J9170	per 20 mg
	80 mg	00075-8001-80	1,137.43	J9170	per 20 mg
Anzemet®					
Dolasetron mesylate, sol (20 mg/mL)	5 mL	00088-1206-3	155.88	J1260	per 1 mg
Rubex®					
Doxorubicin, pwd	50 mg	00015-3352-22	197.15	J9000	per 10 mg
	100 mg	00015-3353-22	394.29	J9000	per 10 mg

REIMBURSEMENT

PRODUCT	VIAL SIZE	NDC	MARCH AWP/VIAL	'99 HCPCS CODE	BILLING UNITS
Bedford Laboratories					
Doxorubicin, pwd	10 mg	55390-0231-10	45.98	J9000	per 10 mg
	20 mg	55390-0232-10	90.16	J9000	per 10 mg
	50 mg	55390-0233-01	225.40	J9000	per 10 mg
Doxorubicin, sol (2 mg/mL)	10 mg	55390-0235-10	47.35	J9000	per 10 mg
	20 mg	55390-0236-10	94.70	J9000	per 10 mg
	50 mg	55390-0237-01	236.74	J9000	per 10 mg
	200 mg MDV	55390-0238-01	945.98	J9000	per 10 mg
Adriamycin™					
• Doxorubicin, RDF pwd	10 mg	00013-1086-91	53.64	J9000	per 10 mg
•	20 mg	00013-1096-94	92.00	J9000	per 10 mg
•	50 mg	00013-1106-79	268.18	J9000	per 10 mg
• Doxorubicin, pfs sol (2 mg/mL)	150 mg MDV	00013-1116-83	788.44	J9000	per 10 mg
•	10 mg	00013-1136-91	56.34	J9000	per 10 mg
•	20 mg	00013-1146-94	112.66	J9000	per 10 mg
•	50 mg	00013-1156-79	281.68	J9000	per 10 mg
•	75 mg	00013-1176-87	422.51	J9000	per 10 mg
	200 mg MDV	00013-1166-83	1,104.13	J9000	per 10 mg
DOXIL®					
Doxorubicin, HCl liposome inj. (2mg/mL)	20 mg	61471-0295-12	656.25	J9999*	
Procrit®					
Epoetin alfa	2,000 units/ mL	59676-0302-01	24.00	Q0136'	1,000 units
	3,000 units/ mL	59676-0303-01	36.00	Q0136'	1,000 units
	4,000 units/ mL	59676-0304-01	48.00	Q0136'	1,000 units
	10,000 units/ mL	59676-0310-01	120.00	Q0136'	1,000 units
	20,000 units/ 1 mL MDV	59676-0320-01	240.00	Q0136'	1,000 units
•	40,000 units/ 1 mL SDV	59676-0340-01	480.00	Q0136'	1,000 units
VePesid® *Capsules*					
Etoposide, capsules, 50 mg	20 per box	00015-3091-45	751.60	J8560	50 mg
VePesid® *For Injection*					
Etoposide, injection (20 mg/mL)	100 mg MDV	00015-3095-20	136.49	J9182	per 100 mg
	150 mg MDV	00015-3084-20	204.74	J9182	per 100 mg
	500 mg MDV	00015-3061-20	665.38	J9182	per 100 mg
	1 gm MDV	00015-3062-20	1,296.64	J9182	per 100 mg
Etopophos®					
Etoposide phosphate for injection	100 mg	00015-3404-20	124.14	J9999*	per 100 mg
Fludara®					
• Fludarabine phosphate, pwd	50 mg	50419-0511-06	228.56	J9185	per 50 mg
• Fluorouracil, sol (50 mg/mL)	500 mg	39769-1036-91	3.20	J9190	per 500 mg
•	2,500 mg	00013-1046-94	16.04	J9190	per 500 mg
•	5,000 mg	39769-1056-94	32.06	J9190	per 500 mg
Neupogen®					
• G-CSF (Filgrastim), sol (0.3 mg/mL)	300 mcg	55513-0530-10	172.30	J1440	per 300 mcg
•	480 mcg	55513-0546-10	274.40	J1441	per 480 mcg
Gemzar®					
Gemcitabine HCl	200 mg	00002-7501-01	85.43	J9201	per 200 mg
	1 g	00002-7502-01	427.15	J9201	per 200 mg
Leukine®					
• GM-CSF (Sargramostim), lyophilized	250 mcg	58406-0002-33	134.85	J2820	per 50 mcg
Leukine Liquid® (Sargramostim), solution	500 mcg	58406-0001-35	269.71	J2820	per 50 mcg
Zoladex®					
Goserelin acetate, implant	3.6 mg syringe	00310-0960-36	469.99	J9202	per 3.6 mg
	10.8 mg syringe	00310-0961-30	1,409.98	J9202	per 3.6 mg
Kytril®					
Granisetron HCl, sol (1 mg/mL)	1 mL	00029-4149-01	177.40	J1626	per 100 mcg
	4 mL	00029-4157-01	709.60	J1626	per 100 mcg
Ifex®					
• Ifosfamide	1 g	00015-0556-41	134.16	J9208	per 1 g
	3 g	00015-0557-41	402.49	J9208	per 1 g
Ifex®*/Mesnex*™					
Ifosfamide (10 x 1 g)/mesna (10 x 1 g MDV)	Combo-Pack	00015-3554-27	2,244.08	J9208/J9209	
Ifosfamide (2 x 3 g)/mesna (6 x 1 g MDV)	Combo-Pack	00015-3564-15	1,346.38	J9208/J9209	
Ifosfamide (5 x 1 g)/mesna (3 x 1 g MDV)	Combo-Pack	00015-3556-26	928.70	J9208/J9209	
Venoglobulin I					
Immunoglobulin intravenous, 5% pwd w/v set	2.5 g	49669-1602-01	152.05	J1561	per 500 mg
	5 g	49669-1603-01	304.10	J1561	per 500 mg
	10 g	49669-1604-01	608.20	J1561	per 500 mg
Venoglobulin S					
Immunoglobulin intravenous, 5% sol w/v set	2.5 g	49669-1612-01	225.00	J1561	per 500 mg
	5 g	49669-1613-01	450.00	J1561	per 500 mg
	10 g	49669-1614-01	900.00	J1561	per 500 mg
Immunoglobulin intravenous, 10% sol w/v set	5 g	49669-1622-01	475.00	J1562	per 5 g
	10 g	49669-1623-01	950.00	J1562	per 5 g
	20 g	49669-1624-01	1,900.00	J1562	per 5 g

REIMBURSEMENT

PRODUCT	VIAL SIZE	NDC	MARCH AWP/VIAL	'99 HCPCS CODE	BILLING UNITS
Immune globulin intravenous, 10% sol w/IV set	1 g	00192-0649-12	75.00	J1561	per 500 mg
	5 g	00192-0649-20	375.00	J1562	per 5 g
	10 g	00192-0649-71	750.00	J1562	per 5 g
	20 g	00192-0649-24	1,500.00	J1562	per 5 g
	1 g	00026-0648-12	90.00		
	5 g	00026-0648-20	450.00		
	10 g	00026-0648-71	900.00		
	20 g	00026-0648-24	1,800.00		
Immune globulin intravenous, 5%-10% w/IV set	2.5 g	52769-0471-72	168.93	J1561 or J1562	
	5 g	52769-0471-75	337.86	J1561 or J1562	
	10 g	52769-0471-80	675.72	J1561 or J1562	
	120 mcg	60492-0021-01	142.00	J2792	
•Rho D Immune globulin intravenous	300 mcg	60492-0023-01	324.50	J2792	
•	1,000 mcg	60492-0024-01	1,081.50	J2792	
Intron® A					
Interferon alfa-2b, solution HSA-free	3 MIU	00085-1184-01	34.93	J9214	per 1 MIU
	3 MIU PAK	00085-1184-02	34.93	J9214	per 1 MIU
	5 MIU	00085-1191-01	58.21	J9214	per 1 MIU
	5 MIU PAK	00085-1191-02	58.21	J9214	per 1 MIU
	10 MIU	00085-1179-01	116.44	J9214	per 1 MIU
	10 MIU PAK	00085-1179-02	116.44	J9214	per 1 MIU
	18 MIU MDV	00085-1168-01	209.58	J9214	per 1 MIU
	25 MIU MDV	00085-1133-01	291.11	J9214	per 1 MIU
Interferon alfa-2b, pwd	3 MIU MDV	00085-0647-03	34.93	J9214	per 1 MIU
	5 MIU MDV	00085-0120-02	58.21	J9214	per 1 MIU
	10 MIU MDV	00085-0571-02	116.44	J9214	per 1 MIU
	18 MIU MDV	00085-1110-01	209.58	J9214	per 1 MIU
	25 MIU MDV	00085-0285-02	291.11	J9214	per 1 MIU
	50 MIU MDV	00085-0539-01	582.17	J9214	per 1 MIU
Roferon® A					
Interferon alfa 2a, pwd w/3 mL diluent	18 MIU	00004-1993-09	197.56	J9213	per 3 MIU
Interferon alfa 2a, sol (3 MIU/mL)	3 MIU	00004-2009-09	34.97	J9213	per 3 MIU
Interferon alfa 2a, sol (6 MIU/mL)	6 MIU	00004-2007-09	69.91	J9213	per 3 MIU
Interferon alfa 2a, sol (10 MIU/mL)	9 MIU	00004-2010-09	98.44	J9213	per 3 MIU
Interferon alfa 2a, sol (6 MIU/mL)	18 MIU	00004-2011-09	209.60	J9213	per 3 MIU
Interferon alfa 2a, sol (36 MIU/mL)	36 MIU	00004-2012-09	419.26	J9213	per 3 MIU
Camptosar®					
Irinotecan HCl injection, CPT-11 (20 mg/mL)	2 mL	00009-7529-02	231.80	J9206	per 20 mg
	5 mL	00009-7529-01	579.53	J9206	per 20 mg
Leucovorin, pwd	50 mg	55390-0051-10	18.44	J0640	per 50 mg
	50 mg	58406-0621-05	21.53	J0640	per 50 mg
	100 mg	55390-0052-10	35.00	J0640	per 50 mg
	100 mg	58406-0622-06	39.41	J0640	per 50 mg
	200 mg	55390-0053-01	78.00	J0640	per 50 mg
	350 mg	58406-0623-07	137.94	J0640	per 50 mg
Lupron®					
Leuprolide acetate depot, susp. (7.5 mg/mL)	7.5 mg	00300-3629-01	594.65	J9217	per 7.5 mg
	22.5 mg	00300-3346-01	1,783.95	J9217	per 7.5 mg
Lorazepam, sol (2 mg/mL)	2 mg MDV	00008-0581-04	9.85	J2060	per 2 mg
Lorazepam, sol (2 mg/mL)	20 mg MDV	00008-0581-01	87.74	J2060	per 2 mg
Lorazepam, sol (4 mg/mL)	40 mg MDV	00008-0570-01	109.66	J2060	per 2 mg
Lorazepam, sol (2 mg/mL), w/ syringe	2 mg	00008-0581-02	10.39	J2060	per 2 mg
Mannitol, 25% sol	50 mL	00074-4031-01	5.29	J2150	per 50 mL
Mustargen®					
Mechlorethamine HCl, pwd	10 mg	00006-7753-31	10.48	J9230	per 10 mg
Megace®					
Megestrol acetate, tablets, 20 mg	100 per bottle	00015-0595-01	75.68		
Megestrol acetate, tablets, 40 mg	100 per bottle	00015-0596-41	134.96		
	250 per bottle	00015-0596-46	330.68		
	500 per bottle	00015-0596-45	647.88		
Megace® Oral Suspension					
Megestrol acetate, oral suspension	8 fl oz	00015-0508-42	131.96		
Alkeran®					
•Melphalan hydrochloride, pwd	50 mg	00173-0130-93	364.74	J9245	per 50 mg
•Melphalan hydrochloride, tablets, 2 mg	50 per bottle	00173-0045-35	104.11	J8600	2 mg
Mesnex®					
Mesna, sol (100 mg/mL)	1 g MDV	00015-3563-02	174.30	J9209	per 200 mg
Methotrexate, pwd	20 mg	00205-4654-90	2.78	J9250	per 5 mg
	20 mg	58406-0673-01	5.03	J9250	per 5 mg
	1,000 mg	58406-0671-05	61.44	J9260	per 50 mg
Methotrexate, pres. free sol (25 mg/mL)	50 mg	55390-0031-10	6.88	J9260	per 50 mg
	100 mg	55390-0032-10	8.75	J9260	per 50 mg
	200 mg	55390-0033-10	17.50	J9260	per 50 mg
	250 mg	55390-0034-10	26.88	J9260	per 50 mg
Methotrexate, sol w/pres. (25 mg/mL)	50 mg	58406-0681-14	4.75	J9260	per 50 mg
	250 mg	58406-0681-17	20.48	J9260	per 50 mg
Methotrexate, tablets, 2.5 mg	100 per bottle	00555-0572-02	362.95	J8610	2.5 mg
	36 per bottle	00555-0572-35	130.05	J8610	2.5 mg

REIMBURSEMENT

PRODUCT	VIAL SIZE	NDC	MARCH AWP/VIAL	'99 HCPCS CODE	BILLING UNITS
Metoclopramide, pres. free sol (5 mg/ml)	50 mg	00013-6116-95	8.73	J2765	up to 10 mg
	150 mg	00013-6126-95	23.54	J2765	up to 10 mg
Mutamycin®					
Mitomycin, pwd	5 mg	00015-3001-20	134.11	J9280	per 5 mg
	20 mg	00015-3002-20	452.91	J9290	per 20 mg
	40 mg	00015-3059-20	915.09	J9291	per 40 mg
Novantrone®					
Mitoxantrone, sol (2 mg/mL)	20 mg MDV	58406-0640-03	812.74	J9293	per 5 mg
	25 mg MDV	58406-0640-05	1,015.90	J9293	per 5 mg
	30 mg MDV	58406-0640-07	1,219.10	J9293	per 5 mg
Sandostatin®					
Octreotide Acetate, sol (50 mcg/mL)	50 mcg amp	00078-0180-03	5.21	J9999*/J3490†	
Octreotide Acetate, sol (100 mcg/mL)	100 mcg amp	00078-0181-03	9.54	J9999*/J3490†	
Octreotide Acetate, sol (500 mcg/mL)	500 mcg amp	00078-0182-03	43.62	J9999*/J3490†	
Sandostatin LAR® Depot					
Octreotide Acetate, inj	10 mg	00078-0340-84	1,368.75	J9999*/J3490†	
Octreotide Acetate, inj	20 mg	00078-0341-84	1,368.75	J9999*/J3490†	
Octreotide Acetate, inj	30 mg	00078-0342-84	2,053.12	J9999*/J3490†	
Zofran®					
Ondansetron HCl, sol (2 mg/mL)	40 mg MDV	00173-0442-00	244.43	J2405	per 1 mg
Ondansetron HCl, sol (2 mg/mL)	4 mg	00173-0442-02	24.45	J2405	per 1 mg
Ondansetron HCl, sol premixed (32 mg/50 mL D5W)	32 mg bag	00173-0461-00	206.41	J2405+	per 1 mg
Neumega®					
Oprelvekin	5 mg	58394-004-01	235.00	J2355	per 5 mg
TAXOL®					
Paclitaxel, semi-synthetic sol (6mg/ml)	30 mg	00015-3475-30	182.63	J9265	per 30 mg
	100 mg	00015-3476-30	608.76	J9265	per 30 mg
	300 mg	00015-3479-11	1,826.25	J9265	per 30 mg
Aredia®					
Pamidronate disodium, pwd	30 mg	00083-2601-04	218.24	J2430	per 30 mg
	90 mg	00083-2609-01	621.75	J2430	per 30 mg
Nipent™					
Pentostatin, pwd	10 mg	62701-0800-01	1,645.00	J9268	per 10 mg
• Prochlorperazine, sol (5 mg/mL)	10 mL vial	00007-3343-01	41.00	J0780	
Prochlorperazine, tablets, 10 mg	100 per box	00007-3367-20	94.50		
Zantac®					
Ranitidine, sol (50 mg/2 mL)	2 mL	00173-0362-38	3.99	J9999*/J3490†	
Respigam®					
Respiratory syncytial virus immunoglobulin, human	20 mL	60574-2102-01	427.82	J1565	per 50 mg
	50 mL	60574-2101-01	717.57	J1565	per 50 mg
Rituxan™					
Rituximab	100 mg	50242-050-21	421.35	J3490†/J9999*	per 100 mg
Zanosar®					
Streptozocin, pwd	1 g	00009-0844-01	106.16	J9320	per 1 g
Vumon®					
Teniposide, 50 mg	5 mL amp	00015-3075-19	188.25	J9999*	per 50 mg
Thioplex®					
Thiotepa, pwd	15 mg	58406-0661-02	105.58	J9340	per 15 mg
Hycamtin™					
Topotecan HCl lyoph pwd	4 mg	00007-4201-01	575.20	J9350	per 4 mg
	4 mg, 5s	00007-4201-05	575.20	J9350	per 4 mg
Herceptin®					
Trastuzumab	440 mg	50242-0134-60	2,262.50	J9999*/J3490†	
Neutrexin®					
Trimetrexate glucuronate, pwd	25 mg, 10s ea.	58178-0020-10	660.00	J3305	per 25 mg
	25 mg, 50s ea.	58178-0020-50	660.00	J3305	per 25 mg
Trimetrexate glucuronate, sol	200 mg	58178-0021-01	538.00	J3305	per 25 mg
Urokinase, sol (5,000 IU/mL)	5,000 IU	00074-6111-01	56.26	J3364	per 5,000 IU
	9,000 IU	00074-6145-02	98.13	J3364	per 5,000 IU
Vinblastine sulfate, pwd	10 mg	55390-0091-10	21.25	J9360	per 1 mg
Vinblastine sulfate, sol (1 mg/mL)	10 mg	00469-2780-30	43.23	J9360	per 1 mg
Vincristine, preservative free sol (1 mg/mL)	1 mg	00013-7456-86	37.08	J9370	per 1 mg
	1 mg	61703-0309-06	31.75	J9370	per 1 mg
	2 mg	00013-7466-86	74.13	J9375	per 2 mg
	2 mg	61703-0309-16	38.25	J9375	per 2 mg
Vincristine, preservative free sol (5 mg/mL)	50 mg	61703-0210-11	7.47	J9380	per 5 mg
	150 mg	61703-0210-31	20.30	J9380	per 5 mg
NAVELBINE®					
Vinorelbine tartrate, sol (10 mg/mL)	1 mL	00173-0656-01	69.72	J9390	per 10 mg
	5 mL	00173-0656-44	348.58	J9390	per 10 mg

• An AWP, HCPCS code or NDC that has changed or been added has been highlighted in color.

* The drug code J9999 is defined as "not otherwise classified, antineoplastic drug." The Health Care Financing Administration (HCFA) has not assigned specific codes to these drugs.

† The drug code J3490 is defined as "unclassified drugs." These drugs may or may not be defined as an unclassified drug in your area. Consult your local carrier for the appropriate code.

‡ Q0136 is the code for non-ESRD (End Stage Renal Disease) use.

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May/June 1999

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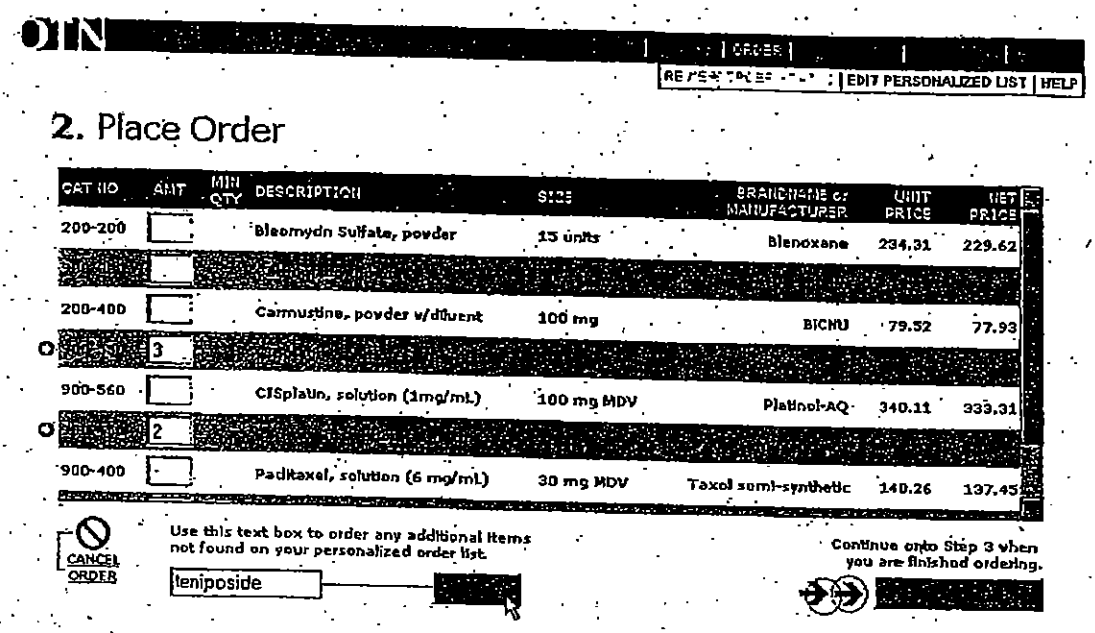

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ONCOLOGY THERAPEUTICS NETWORK

Billing for Clinical Trials

Bobbi Buell, MBA
President
Documedics

Q: *Is billing for clinical trials always fraud?*

A: Clinical trials is a very tricky area of billing because it is unclear, even to the experts and to Medicare itself. This is true for hospital-based and physician-based cancer centers. However, there is one area that is crystal clear. This is when the provider receives free drug and a patient management fee from the trial sponsor. The drugs and Evaluation & Management (EM) services are then billed to Medicare. This constitutes double billing. It is also a focal point for the Office of Inspector General (OIG) this year. Therefore, if you do trials, it is important to clarify in writing with trial sponsors whether management fees cover patient or data management. Patient management fees will negate billing for EM services in association with clinical trials, if this represents double billing.

Q: *What are the "gray areas" of clinical trial billing?*

A: This depends upon what type of trial it is. In cancer care, there are two prevalent types of trials. There are trials where the drug is not FDA-approved and Phase IV trials where the drug is FDA-approved. The problems differ in each scenario.

- Non-FDA approved drug trials (Phase III): Obviously, the drug is not billable to almost all insurance companies without FDA approval. The "gray area" is whether or not the infusion codes, labs, and EM services can be billed. We do not recommend that you bill these to Medicare, unless EM and lab services are CLEARLY documented as being done for reasons other than trial administration. Do not try to force the documentation just for billing. Private insurance companies vary as to whether they pay for services secondary to experimental drug trials. While we see more and more private insurers covering services associated with trials, it is ALWAYS wise to check your contract or verify coverage before treatment.
- FDA-approved drug trials (Phase IV): This is even a more confusing scenario. Many attorneys do not agree as to how Phase IV trials should be handled. If the indication (diagnosis) for the drug given in the trial is unpublished and/or not included in the compendia (depending upon the payer), our view is that, from a billing standpoint, it is the same situation as non-FDA approved drug trials. Thus, drug and services are not billable. However, if the indication for the drug has been published (depending upon where it has been published) or is part of the drug's package insert, then the drug and services can be billed. Again, whether or not the drug, labs, and EM services will be paid by any insurance company depends upon how "off label" the trial is. For private insurance companies, this may also depend upon Cancer Coverage laws in your state and whether or not the plan is self-insured. Self-insured plans are often not subject to Cancer Coverage laws under the ERISA exception.

Q: *Can I bill the patient for Phase IV trials that are not covered by insurance?*

A: Obviously, you cannot bill patients for any drug that is provided free of charge by the trial sponsor. You can bill them for chemo administration, lab tests, and EM services that will not otherwise be paid. Medicare patients must sign an Advanced Beneficiary Notice (ABN) for each service rendered in a clinical trial. For Medicare, services covered under the ABN must be billed using a –GA modifier.

Q: *What happens when a drug goes from experimental to commercial use?*

A: If you have drug left over from a trial that was received free of charge from the trial sponsor, you cannot bill for it. However, you can go ahead and bill for other services. If you fear that an insurance company will not pay for chemotherapy administration without a drug charge, just do not charge (sometimes known as a "zero charge") for the drug under a miscellaneous drug code (J3490 or J9999). Alternatively, if the insurance company requires it, use the National Drug Code (NDC) number.

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For further information, you can contact the United States Pharmacopeial Convention, Inc. (USP-DI) at (301) 881-0666 and/or American Society of Health System Pharmacists, Inc., (AHFS) at (301) 657-3000.

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220-310	0085-1236-01	Rebetron	Interferon alpha-2b/Ribavirin 1200 MDV	22.8 MIU/3.8 mL; 3 MIU/0.5 mL	$645.00	$720.00
220-320	0085-1241-02	Rebetron	Interferon alpha-2b/Ribavirin 1000/Pak 3	3 MIU/0.5 mL	$584.00	$651.59
220-330	0085-1236-02	Rebetron	Interferon alpha-2b/Ribavirin 1000 MDV	22.8 MIU/3.8 mL; 3 MIU/0.5 mL	$584.00	$651.59
220-340	0085-1241-03	Rebetron	Interferon alpha-2b/Ribavirin 600/Pak 3	3 MIU/0.5 mL	$478.00	$533.64
220-350	0085-1236-03	Rebetron	Interferon alpha-2b/Ribavirin 600 MDV	22.8 MIU/3.8 mL; 3 MIU/0.5 mL	$478.00	$533.64
220-305	0085-1258-01	Rebetron	Interferon alpha-2b/Ribavirin 1200/3 MIU Pen	6 doses x 3 MIU/0.2 mL	$645.00	$720.00
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220-161	0085-1191-01	J9214	Intron A solution	5 MIU/0.5 mL	1	$53.20	$59.38
220-171	0085-1179-01	J9214	Intron A solution	10 MIU/1 mL	1	$106.40	$118.76
220-191	0085-1168-01	J9214	Intron A solution	18 MIU/MDV	1	$191.55	$213.77
220-194	0085-1133-01	J9214	Intron A solution	25 MIU/MDV	1	$266.05	$296.93
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220-166	0085-1191-02	J9214	Intron A solution, Pak-5	5 MIU	6	$53.20	$59.38
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220-170	0085-0571-02	J9214	Intron A powder	10 MIU/MDV	1	$106.40	$118.76
220-186	0085-1110-01	J9214	Intron A powder	18 MIU/MDV	1	$191.55	$213.77
220-175	0085-0285-02	J9214	Intron A powder	25 MIU/MDV	1	$266.05	$296.93
220-180	0085-0539-01	J9214	Intron A powder	50 MIU/MDV	1	$532.10	$593.81

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220-168	0085-1235-01	Intron A Multidose Pen	Interferon alpha-2b, 6 doses	5 MIU Pen	$319.25	$356.29
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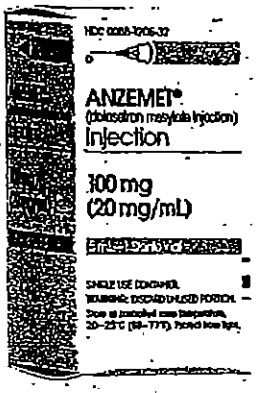

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970-305	0088-1203-29	Anzemet	dolasetron mesylate	100 mg tablets blister pack	5	$301.00	$686.40
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ONCOLOGY DRUG UPDATES

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Overview of the Low Molecular–Weight Heparins

Jane Pruemer Pharm.D.

Unfractionated heparin (UFH) has been commonly used to prevent and treat arterial and venous thrombosis; however, because it is associated with complications such as bleeding, thrombocytopenia, and osteoporosis, the low molecular–weight heparins (LMWHs) have been developed. The LMWHs have been intensely studied for 20 years, and the result is the current availability of three LMWHs in the United States: enoxaparin, dalteparin, and ardeparin (Table 1). These agents appear to be supplanting the use of UFH in many instances, including the treatment of deep venous thrombosis (DVT) and pulmonary embolism.

Heparin produces its anticoagulant effects by binding to antithrombin III (ATIII) and inhibiting thrombogenesis primarily through inactivation of factors IIa and Xa. The interaction of heparin with ATIII is mediated through a pentasaccharide portion of the molecule that is distributed randomly in UFH. The antithrombotic effects of UFH require interaction with ATIII and factor Xa, ultimately causing inactivation of factor Xa. UFH also binds to and inactivates factor II (thrombin). LMWHs were created to have relatively higher anti–factor Xa activity and lower anti–factor II activity compared with those of UFH. The potency of LMWHs is reflected by the ratio of anti–factor Xa to anti–factor IIa activity (see Table 1).

LMWHs have a higher and more predictable and efficient bioavailability than does UFH (Table 2). Once absorbed from the subcutaneous tissue, serum concentrations of LMWHs remain constant and persist longer than those of UFH. The longer half-life and more predictable bioavailability of LMWHs have been attributed to the LMWHs' decreased binding to endothelium, macrophages, and other heparin binding proteins. Theoretically, bleeding would be less likely to occur with LMWHs because of this reduced binding to platelets, endothelium, and other proteins. Because of their predictable antithrombotic response and longer bioavailability, LMWHs can be used relatively safely without the need for daily anticoagulation monitoring in the majority of patients. Based on altered clearance, anti–factor Xa concentrations should be monitored in patients with renal insufficiency (creatinine clearance < 30 mL/min) and in obese patients (> 80 kg).[1]

The current Food and Drug Administration–approved indications for the use of the various LMWHs are provided in Table 3. The use of prophylactic anticoagulation therapy in surgical cases of patients at high risk (eg, obese patients, patients older than 40 years) or in cases of high surgical risk (eg, pelvic or abdominal surgery) can prevent the occurrence of DVT and subsequent pulmonary embolism. The results of a large number of clinical trials of various LMWHs support these indications.[2-4] In addition, many ongoing clinical trials are evaluating the use of LMWHs in patients with spinal cord injury,[5] trauma,[6] and various medical illnesses (eg, nonischemic stroke, cardiovascular diseases).[7]

The availability and efficacy of the LMWHs has contributed significantly to changes in the care of patients with DVT. The treatment of this disorder in uncomplicated cases is shifting from an inpatient to outpatient setting based on the results of well-controlled clinical trials.[8,9] Levine and associates,[8] for example, randomized 500 patients with proximal DVT to receive either standard intravenous (IV) UFH or subcutaneous enoxaparin at 1 mg/kg every 12 hours. The enoxaparin was primarily administered to outpatients. All patients were initially administered warfarin, and the UFH or enoxaparin was discontinued once the international normalized ratio reached 2 to 3. During a 3-month followup, 5.3% of patients receiving enoxaparin and 6.7%

Table 1. *Comparison of LMWHs*

GENERIC NAME	TRADE NAME	MANUFACTURER	HALF-LIFE	FACTOR Xa/IIa RATIO	AVERAGE MOLECULAR WEIGHT
Enoxaparin	Lovenox®	Rhone-Poulenc Rorer	4.5	2.7:1	4,500 d
Dalteparin	Fragmin®	Pharmacia & Upjohn	2–4	2.0:1	4,000–6,000 d
Ardeparin	Normiflo®	Wyeth-Ayerst	1.2–3.3	2.0:1	5,600–6,500 d

LMWH = low molecular–weight heparin.

Continued on next page

of patients receiving UFH experienced a recurrence of DVT. The difference between these recurrence rates was not statistically significant, nor was the incidence of major bleeding between the groups.

Koopman and colleagues[9] performed another major study confirming the potential for outpatient treatment of DVT. Four hundred patients with acute DVT were randomized to receive either standard IV UFH or a subcutaneous fixed dose of the LMWH nadroparin. Again, the LMWH patients received outpatient treatment. DVT recurred in 8.6% of the UFH patients and 6.9% of the nadroparin patients. Major bleeding occurred in 2% of the UFH patients and in 0.5% of the nadroparin patients. The quality of life was reported to be statistically significantly better in the LMWH group.

Venous thromboembolic disease commonly occurs in cancer patients and complicates the management of the disease. The pathogenesis of thrombosis in these patients is multifactorial and may include tumor-cell-derived factors, leukocyte procoagulant activities, tumor-cell-derived mediators of platelet adhesion/aggregation, or endothelial cell procoagulant activities. Comorbid predisposing factors, including cancer, and the use of anticancer drugs such as tamoxifen may contribute to the development of thromboses in this patient population. Cancer patients with thromboembolic disease should initially be treated as those without cancer, but may need to be fully anticoagulated for their entire lives, or at least as long as they have active disease. Low molecular weight heparin use in the treatment of thromboembolic disease in cancer patients may allow for the management of these patients as outpatients.

For many years, UFH has been used successfully in primary and secondary prophylaxis of DVT and in the treatment of DVT and pulmonary embolism. The LMWHs, however have proved to be appealing to clinicians because of their improved bioavailability, predictable anticoagulation, ease of administration to outpatients, and the lack of need for monitoring of anticoagulation activity.

Table 2: *LMWH Compared with UFH*

PROPERTY	LMWH	UFH
Molecular weight	4,000–5,000 d	5,000–30,000 d
Plasma half-life	4–6 h	1–2 h
Mechanism of action	Anti–factor Xa more than anti–factor II activity	Anti–factor II more than anti–factor Xa activity
Administration	SC	SC, IV
Anticoagulation monitoring tests	Serum antifactor Xa	APTT, heparin
Antidote	Protamine not very effective	Protamine

APTT = activated partial thromboplastin time; LMWH = low molecular-weight heparin; SC = subcutaneous; UFH = unfractionated heparin.

Table 3. *FDA-Approved Indications for LMWHs*

Indication	Ardeparin	Dalteparin	Enoxaparin
Prophylaxis in high-risk abdominal surgery	No	Yes	Yes
Prophylaxis in total knee replacement	Yes	No	Yes
Prophylaxis in total hip replacement	No	Yes	Yes
Unstable angina and non–Q wave MI	No	No	Yes
DVT treatment	No	No	Yes

DVT = deep venous thrombosis; FDA = Food and Drug Administration; LMWH = low molecular-weight heparin; MI = myocardial infarction.

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